

ALL EDMOND HAMILTON ISSUE

No. 7 • WINTER 1969 • ICD • 50c

SCIENCE FICTION ADVENTURE CLASSICS

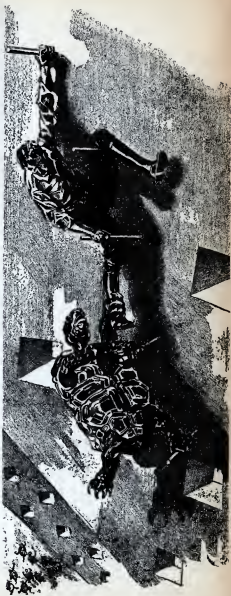
THE OTHER SIDE OF THE MOON

THE MAN WHO LIVED TWICE

THE REVOLT
ON THE
TENTH
WORLD



NO. 7 • WINTER 1969 • SCIENCE FICTION ADVENTURE CLASSICS ALL EDMOND HAMILTON ISSUE



THE OTHER SIDE OF THE MOON



ALL EDMOND HAMILTON ISSUE

SCIENCE FICTION ADVENTURE CLASSICS

**NO. 7
WINTER
1969**

LONG COMPLETE NOVEL

THE OTHER SIDE OF THE MOON 4

TWO EXCITING NOVELETS

THE MAN WHO LIVED TWICE 88

THE REVOLT ON THE TENTH WORLD . . . 103

**COVER BY WESSO
"THE OTHER SIDE OF THE MOON"**

**JACK LESTER, Editor and Publisher
RALPH ADRIS, Managing Editor**

**HENRY ROBERTS, Associate Editor
FRANK JONES, Art Director**

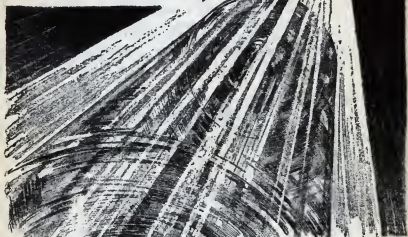
SCIENCE FICTION ADVENTURE CLASSICS, is published quarterly by ULTIMATE PUBLISHING CO. Bayside, Long Island, N.Y. at 50c a copy. Subscription rates: One Year (4 issues) U.S. and possessions: \$1.65; Canada and Pan American Union Countries \$2.00; all other countries \$2.50 copyright 1969 by Ultimate Pub. Co. Copyright 1927 by E.D. Inc, Copyright 1938 and 1940 by Ziff-Davis Pub. Co. Inc. All rights reserved.



THE OTHER SIDE OF THE MOON

EDMOND HAMILTON

Illustrated by WESSO



Astronomers seem to be pretty well agreed that the moon is uninhabitable. But even the Lick Observatory telescope, which is the most powerful one of its kind, has naturally enough been able to see only the one side of the moon—the side that is turned to the earth. Only a trip to the moon and around it would disclose what there is on the other side.

Mr. Hamilton can be depended on to furnish an altogether novel way of reaching the moon and makes it seem so logical it seems a wonder some such method hasn't been devised a long time ago.

"The Other Side of the Moon" raises several other interesting questions, among them being, "Who were the first inhabitants of the earth?" So many "obviously" impossible dreams have recently become real achievements, that we can almost begin to read less skeptically about cosmic travel—particularly when it is offered in as plausible a manner as it is in this story. *

Illustrated by WESSO

* This is the original blurb.

Copyright 1927 by E. P. Inc.

Chapter I The Howland Sensation

It is only now, in beginning this record of our great adventure, that I realize at last how fragmentary and incomplete such a record must be. For it is only now, looking back upon the thing, that I perceive how much of it remains, and will forever remain, unknown. Even I, Martin Foster, who was one of those to penetrate into the very center of that eon-old menace that gathered out there on our moon's far side, can offer but few explanations of what I experienced and saw. It is because of that, therefore, that this record must remain a purely personal one, from the first.

It was the Howland sensation that was the first of it, to me, that astounding blotting out of Dr. Herman Howland and four fellow-scientists in the interior of Yucatan which flamed from the newspaper headlines for days. It was a sensation that was intensified at Mid-Western University, where Howland had held the chair of Anthropology, and where I was a humble chemistry-instructor. There were investigations, discussions, rumors, a flurry of general excitement which swept across the campus for weeks. Yet all of this yielded, in the end, no more information really than had the first sensational newspaper accounts. And it is in those accounts that one finds, now, the most clear and comprehensive presentation of the tragic affair's main features.

For several years, as those accounts stated, Dr. Howland had been engrossed in a new theory of anthropological origins which he had formed and which he was endeavoring to prove. It was his belief

that a great island-chain had in prehistoric times connected what is now Central America with north-western Africa, and that it was by way of this chain of islands, of which the West Indies and the Azores were the remnants, that human and animal life had poured into the American continents. To support this theory he had made a number of field-trips to Central America, especially to Yucatan, and had collected a mass of evidence tending to establish that region as the first center of life in this hemisphere. This evidence, consisting of the resemblances of human, animal, plant and even insect life in that region to those of northern Africa, had impressed his fellow-anthropologists in spite of their general hostility to his theory. And it was Howland's contention that a comprehensive scientific survey of the Yucatan region would prove his theory beyond any shadow of doubt.

It was from Mid-Western University that such a survey expedition was finally sent forth, early in April. Dr. Howland, despite his youth, was named as its head, and it included five of his scientific associates whose combined knowledge, it was believed, would enable him to cover the field completely. These were Dr. Erasmus Willings, who held the University's chair of General Biology; Dr. John Borkoff, zoologist; Professor Alexander Grant, internationally-known botanist; Professor William Glitz, entomologist; and young Dr. Richard Carson, geologist, who was a personal friend of Dr. Howland, and of myself. Such an array of scientific talent, it was felt, could not fail to unearth whatever scientific evidence as to the truth of Dr. Howland's theory which could

be found, and when the party sailed in April for Yucatan, it seemed certain that it would return with conclusive proof or disproof of that theory.

It was in the latter part of April that news reached us that the party had reached Progreso, on the Yucatan coast, and was preparing for its journey into the little-known interior. The expedition planned, it was stated, to make its way up the winding Carajos River as far as possible by means of native canoes and paddlers, establishing successive camps as it progressed inward and using these as bases of investigation. This first message from the Howland party was received with great interest at the University, especially by myself and by my fellow chemistry-instructor, Harlan Trent, who, with Howland and Carson, had made up for some time a close quartet of friends. That first message, though, proved the only news we were to receive of the party for some time, since a few days later came word from Howland that the expedition was on the point of starting up the river, which automatically cut off their communication with us and with the world.

Thus Howland and his five associates, with their dozen native paddlers, departed up the Carajos from the village at its mouth, passing up into the dark depths of the tangled Yucatan jungles, which even the natives feared. Three weeks then passed with no word from Howland and his party, weeks in which it could only be guessed that they were pushing on into the interior, through the low blue mountains against the currents of their jungle-bordered waterway. Then at the end of those weeks

there came news, abrupt, astounding, news from the village at the Carajos River's mouth, a short, staggering message. Dr. Richard Carson, that sensational message stated, had been found unconscious, drifting down the Carajos in a single large canoe which was loaded with the dead, shattered bodies of four of his associates, of Willings and Borkoff and Glitz and Grant. Of Howland or the party's natives there was no sign, nor had Carson yet recovered from the complete coma in which he had been found.

That bare first announcement of the tragedy catapulted the hitherto unnoticed scientific expedition onto the front pages of the world's newspapers instantly, and struck Mid-Western University and us of its staff with staggering shock. Within ten hours had come a second message that heightened the sensation. The still unconscious Carson and the bodies of his four friends had been removed from the village to Progreso, it was announced, and physicians there had made a careful examination of the four bodies. They stated that those bodies, shattered as they were, had not been crushed in the least from without, but had apparently exploded from within, an *outward* shattering of their bodies that seemed utterly inexplicable. Only some terrific and unpredictable force could ever have shattered them thus, they stated, and so the thing had to be put down, for the time being, as a result of circumstances and forces unknown, which only Carson could explain.

Carson, however, suffering from the horror and shock of whatever tragedy it was that had occurred there in the dark Yucatan jungles,

did not regain consciousness until two days later. When he did recover he cleared up the mystery in a few incoherent words. For almost two weeks he and the party had progressed up the river, Carson stated, making camp at intervals along its banks, and it was at the fourth or fifth of these camps that the catastrophe had occurred. Carson, with his geological passion uppermost, had wandered away from the camp to examine some great boulders farther up the river, he said, making his way clearly by the light of the full moon that swung overhead. He had finished his inspection and was returning toward the camp, he stated, when there had come a terrific flash of brilliant light stabbing down into the camp ahead. He had rushed forward to find the camp a scene of death, the shattered bodies of his four friends and of the dozen natives sprawled about, while tracks by the river's edge showed that Howland had been struck there by the same death and had fallen into the waters and had been carried away. Carson, knowing that a giant lightning bolt had suddenly wiped out all the party but himself, had loaded the bodies of his friends into one of the canoes, had scooped a grave in the soft sand for the natives, and then had pushed off and with horror-numbed brain had pressed down the river, losing consciousness wholly after days of such horror-driven progress, to be found when his canoe and its terrible cargo drifted down to the village at the river's mouth.

Carson's story thus explained the whole apparently inexplicable matter, to the satisfaction of all. The freakish effects of lightning strokes on human bodies were well known,

and it was only such a freak of forces that could explain those bodies' condition. Carson's explanation, therefore, was officially adopted by the authorities at Progreso, and forwarded by them to the Mid-Western University officials. It was suggested by some at Progreso, indeed, that a body of investigation be sent to the scene of the tragedy, but the suggestion was not adopted, either by Carson or the officials. Nothing further could be learned from such an arduous journey, it was pointed out, and it would be impossible to recover Howland's body from the swirling depths of the Carajos. Also the natives' superstitious fear of the interior jungles had been so enhanced by the tragedy, that none would accompany a party on such a trip. So, with the matter explained to the satisfaction of most, the Progreso officials rested and Carson sailed for home.

By the time that Carson arrived, the sensation, which had been headlined by the nation's newspapers for a week, had lessened greatly in importance. The mystery of the deaths of Howland and his friends explained, the press quickly forsook the matter, with perfunctory expressions of regret for the loss of five such brilliant scientists. Even at Mid-Western University the first shock and excitement of the tragedy had passed, and though it was still discussed, it was no longer the sole topic of conversation. It seemed assumed, even by the University's officials, that the Progreso officials were right in stating that nothing more could be done about the matter. So that by the time Carson arrived, though there had been resolutions of regret and the like on all hands, none had considered it as a subject

for further action.

To Harlan Trent and to myself, though, the conclusion of the tragedy seemed unsatisfactory enough. From the first stunning report of the matter we had followed it intently through the lengthy press-articles and it seemed incredible to us, who with Carson had made up Howland's three closest friends, that the matter could end thus, that Carson could return without further efforts to discover his friend's fate. Because of that we were full of questions we desired to put to him on his arrival. It was not until some twenty-four hours after Carson's arrival, though, when we three were smoking silently in my rooms with the smoke of our pipes mingling with the scent of the warm May night that came through the open windows, that we put to him any of those questions.

For a moment after our queries he was silent, his strong face thoughtful, his eyes looking far away. Then, at last, he turned toward us.

"No," he said, in answer to our first question. "Howland's body could not be found." He paused, his eyes strange, and then added: "It could not, because Howland still lives."

We stared at him in utter astonishment for moments, and then Trent, his voice strained, was speaking.

"Howland lives!" he repeated. "But why did you leave him then, Carson? And where on earth is he?"

Carson did not answer, for the moment, gazing at us for but a moment, then turning to the open window beside him. Outside lay the warm darkness of the May

night, the dark masses of trees and buildings looming deeper in that darkness. Above, swinging down toward the western horizon from the zenith, hung the crescent moon, a great sickle of shining silver in the heavens. For moments Carson gazed up toward its gleaming crescent in silence, then turned about to where we stood wondering beside him.

"Howland is not on earth at all," he said, quietly. "Howland—tonight—is somewhere on the moon!"

Chapter II The Moon Raiders

"On the moon!"

The exclamations of Trent and me came together, as we stood there all but stupefied by Carson's statement; but he nodded calmly.

"There is much to tell you," he said, "much that I could not tell when I came back to consciousness there at Progreso, that I dared tell only you two, who know me and can believe. It is unbelievable, almost, but I think that you will believe. Had I told this to the villagers at Progreso, they would have deemed me mad, would have accused me, I think, of the murder of my own friends. So for my own sake—and for Howland's—I caused them to think what all now think, that a lightning-bolt had struck and annihilated our party. But it was no lightning-bolt that did so! It was a power greater and more terrible than lightning, one of which I alone on earth know, and of which I dared tell no one else.

"The story that I told at Progreso was correct, up to a certain point. We did, as I said, progress up the river in stages, making camp at regular intervals along the river's

bank and using these camps as bases for our investigations. At each one we would set out on our studies. Borkoff and Grant were busy with the fauna and flora of the region, classifying and noting unusual characteristics which might prove connecting links with similar animal and plant forms of Africa. In the same way Glitz, the entomologist, was collecting and classifying species similar to African insect-forms, while Howland, and Willings, received and classified in importance the evidence the others brought in. My own work, as geologist, was intended to be the study of any geological formations which might indicate that sometime in the past a subsidence of the level of the Yucatan region had taken place. Such a subsidence, if it could be proved to have taken place, would help to prove that a similar subsidence of the island-chain between Yucatan and Africa had taken place also. We each were busy with our work, therefore, and Howland, as we pushed farther up the river, became more and more enthusiastic over the prospects of proving his theory.

"Four such camps we had made within the first twelve or thirteen days, and it was at the end of two weeks of progress that we made our fifth camp. Our journey up the river, until then, had been the usual one of Central American travelers, an unceasing and toilsome progress against the stiff currents, between banks that were impenetrable walls of jungle vegetation, with the blue mountains glimpsed now and then in the distance. I think that in those two weeks we had progressed not more than sixty miles, but it might have been six hundred for the utter wildness

of the region. During the last ten days we had met not even an Indian, and as we knew that above the first score or so of miles the Carajos had been little explored by white men, we were not surprised at the region's wildness. Our own paddlers, though, were becoming more and more unwilling to progress further up the river. We attributed their unwillingness at first to the stiffening currents which we were now fighting in the narrowing river, but they finally informed us that they feared to go farther, because the upper reaches of the river were the haunts of evil spirits, and had been shunned since time immemorial by the natives of the region. By means of increased wages we induced them to keep on, and so at last made our fifth camp.

"It was in a small clearing in the jungle at the river's bank that we made that camp. Back from that clearing there sloped upward the side of a great, jungle-covered mound, perhaps a thousand feet in height, a squat, conelike hill, at the foot of which stood the clearing. Howland, I remember, was very elated on the night that we camped there, since already, as he believed, we had collected enough scientific evidence almost to support his theory. At this camp, he told me, we would perhaps be able to collect enough to make that proof conclusive, and would not need be press farther up the river. To Howland, and to the rest of us, it seemed that we were on the very threshold of complete success. And then, on that same night, there struck—the terror.

"It was some hours before midnight that the thing came upon us. Darkness lay over the world by then, a darkness that was stygian

in the jungle's depths about us, but the clearing, in which our camp stood, was bathed in the silvery light of the full moon, climbing up toward the zenith. Howland, Willings and Grant, in one of the tents, were going over some of their specimens by the light of a gasoline lantern, while in another Borkoff and Glitz were mending some of the torn clothing of the party. Our paddlers had gathered, as though for protection, about a fire near the clearing's edge. Gazing about, I remembered a curious formation of boulders which I had noticed a little way up the river after we had camped, and as the full moon's light was very bright, thought to stroll up toward them for a preliminary investigation. So, calling out to Howland what I intended to do, I set off along the river's edge, following the clear strip of sand along the water.

"The moonlight was so brilliant that I had no difficulty in finding the rocks I sought, and then for perhaps a half hour I examined them, moving around them. When at last I turned from them, and started back to the camp along the bank, I noticed that the moon had now reached a position directly overhead, a great shining shield hanging there above me. I moved on, toward the camp, and in a minute more could hear its sounds, the high clear voice of Howland, the low murmurs of the natives grouped around the fire. A moment more would bring me within sight of it, I knew. But in that moment, before I could take another step, there came the light.

"It was like no light ever seen by man before. It was a gigantic shaft of blinding brilliance, a mighty beam of pure, concentrated and

dazzling white light, hundreds of feet across, that stabbed down toward us from directly overhead! A colossal brilliant ray that shot downward from the heavens and vanished, in a single instant, all but blinding me even as I shrank back stunned. I had seen, though, that that mighty beam had struck the top of the great mound behind our camp, lightning-like. I had sensed, rather than seen, something that had seemed to flash down before that beam. Stunned, eyes blinded from the brilliance of the terrific light, I stood dazed for a moment, hearing the excited cries of Howland and the others, the sudden wails of the natives. I sprang forward, was at the clearing's edge in a moment, saw Howland and the others running toward the great mound excitedly, saw the natives huddled in fear apparently at the clearing's edge. I was about to spring after my friends when I saw them, at the foot of the great mound's slope, stop suddenly short. And then the next moment I too had stopped short, there at the clearing's edge, was gazing like Howland and the others up toward the great mound's summit.

"For from that mound's summit had come suddenly a strange sound, a great muffled clang of metal. Astonished, I stood there, gazing toward the mound, while Howland and the others at the mound's foot gazed up likewise, while the natives crouched fearfully in the clearing. Then from the mound came other sounds, a low muffled throbbing of power that grew quickly louder, and then burst suddenly upon our ears. And at the same instant that it did so I saw rising from the interior of the mound itself, apparently, a half-score of

dark, flat shapes of great size, great flat circles or disks, their diameter a hundred feet approximately, with a low protecting wall around their edges, from which the throbbing came and which were floating smoothly up into the air above the mound! They floated up, hung there for a moment in the brilliant moonlight, and then as though they had glimpsed our camp, were suddenly slanting downward from the mound's summit toward our clearing!

"It was that that broke the spell of astonishment that had been laid upon Howland and the others there who watched. Howland himself still stood utterly dumfounded, but the others, sensing peril, had uttered sharp cries, were leaping back, away from the mound, toward the river. Within another moment those flat great circles had shot downward through the moonlight, above the clearing, and then there was a hiss of suddenly released force, and from the hovering circles' sides there stabbed downward a half-dozen broad beams of pale and misty green light. Down those beams shot toward the running Willings and the others, toward the fear-crazed natives leaping to the river, and as they struck through the air, a swift succession of terrific detonations struck my ears. Then, as I stood there still inside the jungle's edge, spellbound with horror, I saw Willings and the others stagger and fall as the pale green beams struck them, saw their bodies swell out, shatter, *explode!*"

"Even in that horror-stunned moment I guessed, I think, what it was that I was seeing, what terrific weapon it was that was embodied in that misty pale green ray. It was a vacuum-producing ray, I saw even then, one that destroyed instantly whatever atmosphere or air

it touched, without affecting other matter. It was thus I guessed, that the green rays had slain Willings and the others, but even as the thought flashed across my brain it passed, since now the great flat circles were dipping toward the clearing's surface!

"Howland had stood in that dread instant of death in his tracks, motionless with astounded horror as I was, and because he had not fled, the rays had not stabbed toward him. The circles were swooping down toward him, their throbbing loud in my ears, and for the first time my own peril came home to my terror-dazed brain and I shrank back into the jungle at whose edge I stood. There, crouching in the thick vegetation, I gazed with pounding heart out into the moonlit clearing as the circles slanted downward. I saw them land swiftly about Howland, saw that they were grouped in a ring about him there on the ground, great flat circles of metal gleaming in the moonlight, noticed scores of vague shapes upon the surface of those circles, about a central mechanism that seemed to propel and guide them. Then, as I crouched there, there slid aside sections in the protecting walls of the circles, and out of them upon the ground there stepped a score or more of shapes toward Howland, shapes at sight of which a cry of horror all but escaped me. I had, unconsciously, looked upon these terrible attackers as human, at least, but it was not human shapes that stepped forward into the moonlight. They were not men at all, as we know them. They were—turtle-men!

"Turtle-men! It is only by that term that I can describe them, since the bulbous, upright body of each, some four feet in height, was encased

completely in thick, dark shell. From the lower part of that shell-cased body projected two powerful thick limbs ending in broad-webbed and taloned paws, while similar shorter limbs or arms jutted from the body's upper portion. There was an opening in the body's case of shell at the top, and from that opening there projected upward on a flexible, snake-like white neck, the tapering, turtle-like head, its two lidless eyes set on either side with the narrow mouth between them. So grotesque were these turtle-creatures in their mingled familiar and unfamiliar appearance that I felt my senses reeling as I gazed upon them. Then I gripped myself, saw that some of the turtlemen held weapons or instruments of gleaming metal in their grasp, small metal hemispheres to whose curved side a handle was attached and whose flat side they kept turned upon Howland, who stood still swaying in spellbound horror before them.

"A moment they faced him, holding those gleaming hemispheres which were apparently containers of the deadly vacuum ray, and then one spoke. His voice was not loud but was of deeply-vibrating chords, a deep bass so low that many tones in it were but barely caught by my ears. It was to Howland that he had spoken, apparently, though his meaning was of course totally unintelligible to him. Howland, though spoke back in answer, his voice unsteady, apparently to show the creatures that he was intelligent also. They regarded him again in silence, held for a few moments a deep-toned conversation among themselves, and then, still threatening Howland with the hemispheres, came closer to him, examined the clothing he wore, his general appearance, then

stepped back from him. Then one, apparently the leader, uttered a deep order, and at once two of the creatures behind him had stepped forward and had secured Howland's hands behind him with swift-clicking metal bonds of some kind, had secured his ankles likewise and were carrying him to one of the flying-circles resting upon the ground behind them, into which they placed him. Howland was a prisoner!

"All this had taken but moments to enact, there in the brilliant moonlight of the clearing, and now, with Howland disposed of, the turtlemen turned their attention to the camp itself. Swiftly they began a thorough examination of all in it, of the bodies of the scientists lying not far from them, of the natives lying beyond, of the tents and of all in them. I shrank back into the protecting darkness of the jungle vegetation about me as they came nearer, and heard their deep tones only yards away from me, as they carried on their examination. Brain whirling, I watched them. From whence had these turtle-men come, who had emerged from the great mound to pour death upon our camp? Could it be that they had come up from unknown depths in earth's bowels to pour it out upon us? But what of that mighty flash of light that I had seen, that had stabbed down toward the mound from the heavens overhead?

"Once I saw a group of the turtlemen, in the midst of their searchings, stop to gesture up toward the silver shield of the full moon, that was sinking now toward the west with the swift passing of the night. They all gazed up toward it for a moment with their unwinking eyes, then turned back to their search. It flashed across my brain, then,

that when the great light-beam had shot down to the mound, the moon had been directly overhead, and for a moment I wondered if there were any connection between that and the appearance of these strange raiders. Then such speculations passed from my mind as, fascinated with horror, I watched the activities of the turtle-creatures, watched them examining all in our camp. All the books, written records, and gathered specimens and notes in the tents they transferred at once to the flying-circles. The same was done with all tools and apparatus and mechanisms of any kind which they found. I saw some of them with strange little mechanisms engaged apparently in compressing air into small metal containers, storing them in the circles also, saw others do the same with the waters of the river, storing away similar samples of that water. It was a scene of extraordinary activity, there in the moonlit clearing, and I watched it fascinated until the sinking of the moon and the growing pale light in the east warned me that day was dawning. Then I shrank back further into the thick vegetation.

"Day broke, but the turtle-men in the clearing continued their examination and inspection of all things about them with unabated vigor. I dared not venture closer to the clearing in the revealing light of day, but I could see them moving about, could hear their deep tones, and see Howland sprawled out and bound inside the wall of one of the flying-circles. It was that last sight that occupied me most, for my first horror of the turtle-men had passed somewhat and I thought only of rescuing Howland from their grasp. It seemed death to attempt it, though, since about the flying

circles there moved unceasingly the turtle-creatures, a full hundred in all, and more than half of them were armed always with the hemispheres that held the deadly vacuum ray. So through all that day, hour after endless hour, I crouched there in the thick jungle, with the blazing sun beating down above, thirsty, fearful, watching and waiting.

"Night came at last, and as its first hours passed, it was evident that they were ending their activities. They had collected samples or specimens of almost all things about them, of air, water and earth, of the animals they had seen in the jungle, penetrating almost to my place of hiding in pursuit of the latter. Birds, too, and insects, and plants they had gathered and placed in the flying-circles, and it flashed across my brain that these raiders, from wherever they had come, had come to reconnoiter earth only, to collect specimens of its life, to ascertain its condition, and that Howland, to them, was simply another such specimen! The thought spurred me on to attempt to free him. Yet the turtle-men moved in numbers about the clearing so that such an attempt would have been suicide. At last, though, my chance came, a chance so slender that it seemed none. The turtle-men had brought their work to a close, and now as darkness fell swiftly over the land, and as the moon's silver disk again swung up toward the zenith, they had moved toward the edge of the clearing and were gazing up toward the moon's brilliant circle. For the moment the flying-circles were left unguarded, and in that moment I slipped noiselessly out of the jungle's darkness into the moonlit clearing, toward the flying-circle in which Howland lay.

"A few low bushes grew here and there in the clearing, and it was from one to another of these that I now dodged, screening myself as well as possible in their shadow, moving swiftly and with pounding heart toward Howland and the flying circle on which he lay. I was nearer to it, was crouching for a moment in the shadow of a small shrub not thirty feet from it, and the turtle-men had still not turned from the clearing's edge where they stood. My hopes ran high in that instant, and I slipped quickly on, and saw Howland, roused by some sound I made, struggle up on his elbow and recognize me with wide eyes as I slipped toward him, then saw him turn in startled manner, and heard an agonized whisper of 'Back, Carson!' from him. For at that moment, at the clearing's edge, the turtle-men had turned and were coming straight toward me!

"A moment I seemed to see death loom close, then instinctively I shrank back and downward, into the scant shadow of the small bush behind me, while the turtle-men came on across the clearing. They had not perceived me as yet, but in the scant shadow in which I lay I knew that it would be a miracle if they failed to see me now. They came closer while I crouched there, my heart beats racing. The strange creatures seemed all about me, their deep bass voices vibrating on all sides; they were all but treading on me as they moved toward and into their flying-circles. I saw the sections of wall at the edge of these snapping shut, saw the great circles lift smoothly and suddenly upward, as there came from them a sudden throbbing of power, and then knew that they had not seen me. Above me the

great circles were massing, dark disks in the light of the moon overhead, and then they were moving away, were slanting back up toward the summit of the great mound! They were going back to the place from which they had come, and were taking Howland with them!

"As that thought burned across my brain I lost all caution, and rose erect, ran recklessly across the clearing toward the great mound, struggled up the side of it through the thick vegetation that clothed that side. Half-mad I toiled upward, saw above me that the flying-circles had massed above the mound's flat summit, and seemed to be sinking one by one down into that summit. One by one they sank from sight above me, while I toiled frantically upward, their throbbing suddenly muffled as they disappeared, until in a few moments more all had disappeared, while I was still but half-way up to the summit. I struggled frenziedly on, brain on fire, staggered up at last through the last detaining growths, and out on the broad flat summit of the mound. Out across it I stumbled, then suddenly stopped, reeled back. For there before me, yawning in the summit of the great mound, was a mighty shaft-like opening, hundreds of feet across, a great well, whose sides were lined with smooth metal and which extended down into the mound and the earth beneath it for a depth of thousands of feet!

"The full moon was almost directly overhead, now, and its light struck down into that mighty shaft to show me that far at its bottom, thousands of feet below, there gleamed a floor of metal, a metal floor at the center of which was

set a great flat circle of black, shining matter like black glass. Upon this circle there stood a giant cylinder that almost covered it, a great metal cylinder more than a hundred feet in diameter and fully three hundred in height. The top surface of this cylinder was slid outward in two sections, to either side, and down into its hollow interior, one by one, were floating the flying-circles of the turtle-men, stacking one above the other inside that cylinder! One by one they floated down into it until all were within it, until the great cylinder seemed filled with them, and then, with a great clang of metal, the two sections of the top slid back into place, closing its top!

"There was an instant then in which I stared down in utter astonishment, and then, as understanding of it all flashed suddenly across my brain, I staggered to the great shaft's edge, cried out hoarsely, cried out madly to Howland who had vanished with the turtle-men inside that cylinder. But even as I cried out, the end came. The full moon, creeping westward across the zenith, reached a point directly above me, above the shaft, that great shaft aimed upward toward the moon's silver disk like the barrel of some great gun. The next instant there came a clanging great bell-note from near the black-shining disk on which the cylinder rested, a humming that held for a moment, and then suddenly up from that disk there stabbed toward the zenith, toward the full moon overhead, a terrific column of blinding white brilliance, a giant beam of dazzling light that leaped up from the great shaft in the mound and reached out toward the moon's bright disk! And

even as that blinding beam had flashed and vanished before me I had perceived with a sense almost other than sight, that the great metal cylinder beneath had flashed up with it!

"Blinded, stunned, I staggered to the great shaft's edge, gazed down into it. The great humming beneath had ceased, and I could make out the black-shining disk far beneath, but there was no cylinder upon it. There were big shapes about it, there were other great cylinders grouped here and there around it, but the cylinder that held the turtle-men and Howland had vanished, driven out by that blinding beam. I knew, out toward the moon itself! Driven out toward the moon's bright disk that swung still overhead, out of the great shaft in the mound in which no life was now, out by the beam from the black-shining disk below! Projected out through the gulf of space in their great cylinder by that awful column of brilliance, out from earth to moon!

"The moon! I saw it all then, as I swayed there with its bright disk above me. The moon! It was from there that the turtle-men had come in their cylinder, shot across the gulf from moon to earth by a great propelling beam of brilliance, landing there in the great shaft of the mound and pouring out from their cylinder, in their flying-circles, to descend upon our camp. For, I remembered now, it had only been when the moon had been directly overhead that that first great beam had shot downward with the cylinder before it. They had reconnoitered earth's condition, collected samples and specimens, taking Howland himself as one of them, and then on the next night had returned to their cylinder, had waited until

the moon was directly overhead once more, and then had driven out toward it, propelled by a similar brilliant beam from the disk at the shaft's bottom. Raiders from the moon, that had driven back toward it and had taken Howland with them!"

Chapter III

Out to the Moon!

"Raiders from the moon! I remember shaking my hand madly toward its calm-shining disk above me, remember stumbling, weeping with horror, down the great mound's side into the clearing. There working as one in a daze and driven on only by some remnant of reason in my darkening mind, I loaded the bodies of my friends into one of the canoes, scooped a grave in the sand for the natives sprawled there, and then pushed off in that canoe, down the river. Down—down—days, hours, of progress that seemed but unmeasured eternities of horror to my darkened mind. Then at last consciousness completely left me, and I awoke at Progreso, learned how I had been found drifting down the river, and was told of the great sensation that had been caused by that finding. I knew, at once, that were I to tell my tale it would not be credited for an instant, would never be investigated, even, and that I would be regarded as mad and as the mad slayer of my friends. So, for that reason, I told only of seeing a great light-flash, and let them think it a lightning-bolt that had destroyed the party, explaining Howland's disappearance by stating that the bolt that had destroyed him had knocked his

body into the river. None questioned my story, which to them could alone account for the strange shattering of my friends' bodies, and so I came back here, knowing that to you two, who knew Howland and know me, I could tell my tale and be believed.

"I came back, but determined to return again, to return to that great mound whose shaft holds the secret of the moon raiders, the great projector whose beam drove them outward. The presence of that projector there in that great shaft proves that it has been there since time immemorial, there in the great mound, and that in the far past, eons in the past, perhaps, these moon creatures had established communication between earth and moon. They had driven down from moon to earth in their cylinders propelled by a great beam from their apparatus on the moon, I suppose, and once on earth had placed there, in the shaft of the mound, a similar apparatus whose beam drove them back up to the moon. And now, after what countless ages we cannot guess, they have used this method once more, have come down in a raiding, exploring party to reconnoiter earth's present condition and have returned with Howland as their prisoner.

"They have returned with Howland to the moon, but will they come again? I think that they will: I think that these first swift raiders were but a scouting party for myriads of moon creatures that are to follow. I think that out on our moon, a world in which existence must be increasingly difficult for them, these turtle-creatures are gathering their hordes for a descent upon earth, which they visited long ago, and which

they now intend to visit in force, to invade, to conquer. To conquer! For they will conquer. Their deadly vacuum rays and swift flying-circles are weapons men cannot stand against, when that dread invasion comes. And now that the first raiders have returned to the moon, taking Howland with them as a specimen of earth's present races, I think that it will be soon that that invasion will come, that their great cylinders will flash down their mighty force-beam to earth, cylinders filled with countless flying-circles, with numberless moon creatures. A resistless invasion of our world from its own circling satellite!

"But one chance is left to us, I think, to stay that dread invasion. We cannot warn the world now of the doom that gathers above it, for never would the world believe, as you know well. But if we could, in some way, penetrate out to the moon itself, to whatever part of it holds these turtle-creatures' races, could find Howland and learn their plans, their purposes, I think that we could bring back with us evidence that even the most skeptical on earth would credit. I think that if we could rescue Howland, could bring him back, he at least would be able to convince our world of the peril that hangs above it. That is our one chance, and to accomplish it we have that great projector in the depths of the great mound in Yucatan, the projector whose beam drove the cylinder of the moon raiders out to the moon, and which can drive a cylinder of our own outward in the same way. For that is my plan; that we three go down to that mound and its projector, use that projector and one of the cylinders I saw beside it to hurl us out to the

moon, and there attempt to find and rescue Howland and bring him back with us to earth, to bring back proof to earth of the doom that threatens it from its moon!"

Carson's voice ceased, and the silence that followed seemed almost tangible, broken only by the sighing of the warm night breeze outside. Trent and I sat staring toward the speaker, astounded and appalled by what we had heard. But it was Trent who broke the silence first.

"To go out to the moon—to find Howland and bring him back—" he said, unsteadily. "Carson, it seems unthinkable that we could do it, that there are such creatures on the moon who have captured Howland and taken him back there!"

Carson gazed somberly toward him. "But it is so," he said, his eyes brooding. "They captured Howland—and tonight he is out there on the moon with them."

"But creatures from the moon!" I exclaimed. "Creatures from what we know is a wholly dead world!"

Carson shook his head. "We don't know that, Foster," he said. "Our astronomers know less almost about the moon than about other heavenly bodies considering its nearness. They have measured its dimensions and distances, they have weighed it, they have speculated on its origin, but what can they say with certainty as to the moon itself? What can they say as to the origin of its mighty craters, craters which volcanic origin could never have formed, and which they attribute to giant meteors striking the moon? For if such great meteors actually had caused those craters, we could discern them now half-buried in them, yet such giant meteors never have been discovered on the moon's

surface! What can they say as to the great sheets of brilliant, glassy substance that glitter around the crater of Tycho and here and there across the moon's whole face? What can they say certainly about the moon, above all, when one side of its sphere has never been seen by the eye of man, turned always away from earth, as the moon revolves about earth? Who can say what mysteries might not exist upon that other side?

"And these moon creatures, these turtle-beings who came down from moon to earth in their cylinder on that beam of force, is it wholly incredible that such creatures should inhabit our moon? Once that moon was as inhabitable as earth, we know, and if then these turtle-creatures rose to intelligence and power, why should they not have been able to preserve themselves through the centuries as their world died about them? Their power, their science, was great, we know, since ages ago it must have been that they visited earth, built that projector in the mound here on earth, and with that power and that science could they not continue their existence on the moon, perhaps within its depths, perhaps upon the other side? To creatures who could contrive the great projectors whose beams drove their cylinders from moon to earth and back, the contriving of artificial supplies of atmosphere and water would not be hard.

"Powerful and intelligent, those moon creatures have never made attempts to communicate with us on earth, have never, through the ages, made use of the projector which they set here on earth long ago, have never until now revisited

earth, thinking it perhaps still uninhabited by intelligent creatures. Now they have come, though, raiders, explorers, the forerunners of the hordes that I think gather now to follow. But one thing puzzles me about these moon creatures. They must naturally be accustomed to the smaller gravitational power of the moon upon which they live, and so should have been greatly affected by the greater gravitational power of earth, should have been hardly able to move here on earth because of that greater power, just as men upon the moon would be affected by its lesser gravitational power, and could with their earthly muscles leap and step enormous distances. But it was not so with these moon creatures, for when they emerged from their flying-circles to earth's surface, they moved as freely and as unhampered as though they had always lived here. That alone I cannot understand. I can understand clearly the fact of their existence, and the fact that after existing on the moon for ages, unknown to men, they have now begun to look toward our earth, to prepare for a descent upon it."

Carson paused, and then Trent, slowly and thoughtfully, was speaking.

"I understand now too, Carson," he was saying, "understand and believe that these moon creatures have, as you say, captured Howland—are gathering to pour down upon us. Yet, even so, can we really follow them, out the projector's beam to the moon itself?"

Carson nodded calmly. "We can," he said simply. "The great projector is still there in the shaft that has held it for ages, and beside it in that shaft, as I said, I could

see other cylinders like that in which the moon creatures came and went. How they turn on that great beam I know not, but I do know that that beam is only turned on when the projector is pointed exactly at some certain spot upon the moon, a spot toward which the cylinders are driven by the beam. For it was only when the moon was directly above the shaft on the first night that the great beam from the moon drove down, driving the moon raiders' cylinder into that shaft exactly. And on the second night, it was only when the moon's disk was exactly above the shaft again that the great beam drove up from that shaft, driving the cylinder from earth out to the moon. Much there is that we cannot know, cannot guess, about that great enigmatic projector which has lain there in the shaft of the mound for ages, but if the moon creatures operated it to drive them back out to the moon, there is a chance that we can operate it and can follow them. It is the one chance given to us to rescue Howland and to stay the dark doom that is gathering above our world. And shall not we three take it?"

He was silent once more, and in that silent moment our eyes sought, held each others, while through the window beside us there fell upon us the pale brilliance of the crescent moon, a silver scimitar sinking westward through the night. Then suddenly, instinctively, our three hands came out together, clasped tightly.

"We'll take it!" I cried. "We'll go down to the great mound and the projector inside it, and use that projector and its beam to drive us out after the moon raiders and

Howland—out to the moon!"

Chapter IV

The Cylinder Starts

Carson ceased paddling, suddenly, and pointed ahead. "The mound!" he exclaimed. "And there's the camp beneath us!"

Trent and I gazed tensely ahead. The canoe in which we three sat floated in the middle of a narrow yellow waterway, propelled upstream against its strong currents by our paddles. On either side, shading us partially from the heat of the Yucatan sun that blazed above, there rose the tangled thick green walls of the jungle's trees and brush, extending away on either side of the narrowing river for league upon savage league. Ahead though, perhaps a quarter-mile up the river from us, there rose from out the jungle's green sea the squat, great bulk of a mighty mound, like a great rough cone in shape, truncated, or flattened at the summit. Clad with thick vegetation itself, it rose like a green hill from the jungle's tangled plain, and beneath it, between its base and the river, we could discern the brown shapes of tents, pitched in a small clearing, some of them flattened by storms.

"The mound!" I repeated, gazing toward it. "And in it is the shaft—and the projector!"

For days that great green bulk toward which we now gazed had been foremost in all our thoughts. It had been days, weeks, before, that we two had heard Carson's terrible story, had agreed with him to go to this mound to carry out our great plan. We had swiftly secured leave from the University, had left Mid-Western for New Orleans, and within another few

days had reached Progreso by steamer. There, concealing our true mission, we had stated only that we intended to take up again that scientific work of Howland's which had been interrupted by the tragic end of his party. The officials at Progreso had done their best to dissuade us, but had in the end given up, and we had proceeded to the village at the mouth of the Carajos, buying there one of the native canoes and stowing in it our equipment. We had intended from the first to make the trip up-river alone, and found that in any case none in the village would have dared ever to accompany us, so intensified were their ordinary superstitious fears by the tragedy that had befallen the Howland party. So, pushing up-stream alone in our canoe, we had progressed slowly up the river for more than a dozen days, coming at last now within sight of the great mound that was our goal.

Carson, after his first exclamation on sighting the mound, had bent silently and grimly to his paddle, and as Trent and I did likewise, we sent our slender craft spinning upward against the currents toward the camp in the clearing ahead. That clearing lay just at the river's bank, we saw, a level and roughly circular patch of open ground in the jungle, and as we swept nearer toward it we noticed that of the several tents there only one still stood erect, all the others having been battered by rain and wind. Carson, as we swept nearer, pointed mutely to the canoes still drawn up along the bank, dumb evidence of the dozen natives who had paddled them once, and who now lay buried somewhere in the sand along the river's edge. Another mo-

ment and our own canoe had shot in among them. We had stepped out and had secured it to the bank, lifting our equipment from it out into the clearing; then we stood motionless for a moment, gazing about us.

Standing there with Trent and Carson, the thing of which I was most conscious at the moment was the silence of the place. A silence, a hushed stillness, seemed to lie over it, which the monotonous sound of the flowing waters behind us seemed only to intensify. Brilliant birds flashed now and then across the clearing from the encircling jungles, and there was an occasional rustle of some small animal in the vegetation, but the main impression was of a silence and stillness unnatural and foreboding. Carson, beside me, suddenly pointed silently down to the clearing's surface, and as we looked across the soft sand, we saw that upon it were many tracks, some of them tracks of human shoes and feet, but most of them great, paw-like tracks with four taloned toes, such as I had never seen before. At the sight, my heart raced suddenly faster and I raised my eyes to Carson with interrogation in them.

"The moon-creatures?" I whispered, and he nodded.

"The moon-creatures' tracks," he said, in the same low tone. "Everything here seems as I left it."

Trent was gazing intently up toward the great mound whose summit loomed distantly up from the jungle beyond the clearing.

"The mound," he said, "we'll head for it at once?"

Carson shook his head. "Not at once," he told him. "We'll settle our equipment here first, and start for the mound at sunset. I've calcu-

lated that for tonight and several nights, a few hours before midnight, the full moon will be passing over the shaft just as it did a month ago, and I want to be at the projector when that happens, and before it. We'll have time enough."

So, for the next few hours, we occupied ourselves with getting our equipment ready. Setting up our own small tent—we all had an odd reluctance toward using the tents about us—we then arranged beside it the equipment we had brought, laying aside the items which we expected to take with us on our desperate expedition. Among these latter was the rope-ladder we intended to use in descending into the mound's shaft, one of a half-mile in length, almost, yet small in bulk for its length and strength. Heavy automatics and cartridge belts were to form our weapons, with the addition of sheath-knives. In the light knapsacks we were taking with us, were packed condensed foods sufficient for many days, and an assortment of selected drugs. Distributed among us, too, was a compact assortment of small steel tools. Slight enough equipment it was for the most desperate journey men had ever attempted, but we had pinned all to our faith that if the moon creatures could flash across the gulf in their cylinders without other special equipment, we could do so also.

The sorting and assembling of this equipment took us the remaining hours of the afternoon. And as the brilliant tropic sun slanted westward, we prepared and ate a quick meal, then started on our climb toward the great mound's summit. Carson led, choosing the easiest path through the thick jungle

vegetation, while Trent and I followed, bearing the coiled rope-ladder's weight between us. The sun was dipping swiftly toward the west as we pressed on through the tangled masses, and started up the great mound's slope. That slope, we found, was steeper by far than it had seemed from below, and hampered as we were with our equipment and with the weight of the coils of the great ladder, our progress was slow. By the time we had reached the mound's summit, the brilliant sunset was fast fading westward, while high in the heavens eastward the white disk of the full moon was climbing toward the zenith through the darkening skies.

We gave but small attention for the moment to these, all our interest centering on the flat summit on which we found ourselves. A fairly level circle of several hundred feet in diameter was that summit, almost barren of vegetation, but what held our eyes was the great opening that yawned at its center, taking up the great part of the summit itself. It was a great, well-like shaft, at least four hundred feet across, whose smooth metal sides sank vertically downward into depths invisible, whose gathering shadows our eyes could not penetrate, into depths that seemed to us unfathomable as we gazed down in awe into them. We could make out nothing in the shadows beneath, and at last lifted our eyes and looked toward each other. The heavens above had darkened swiftly, and now the pale light of the full moon swinging upward fell upon us, and upon all the far-reaching stretches of jungle that we could vaguely discern from the mound's summit. At last Carson broke the silence.

"Time to go," he said quietly.



"We must be down at the shaft's bottom when the moon swings directly above it."

Swiftly we uncoiled the slender length of the great ladder, fastening one end of it firmly into the ground at the shaft's edge by means of stakes we had brought for the purpose. Then, letting the rest of the ladder unroll into the great well, we saw, it disappear into the shadows far beneath until it

hung steady, vanishing down into those shadows. Carson stepped toward the ladder, then paused, turned and gazed out once more over the distant reaches of the moonlit jungle. We stood gazing, the same thought unspoken in all our minds. Would we ever look out on that moonlit scene again? Then Carson had turned back to the ladder, had knelt and swung himself over the great shaft's edge, holding to it, and then was moving down its length, down the colossal well's side, like an insect crawling down a string.

Another moment and I had followed him, had swung over the edge of the abyss like him, gripping the ladder. As I did so, gazed down and glimpsed the vast depths that yawned beneath, disappearing down into the shadows below, a sudden nausea gripped me for an instant as I swung there dizzily. Then, clinging tightly to the rope rungs, I forced it away, began slowly to descend. Rung after rung, step after step, down the ladder I went. The smooth gleaming metal of the great shaft's wall was all that I could see as I clambered steadily downward. Gazing up, I saw Trent above, following me, his figure darkly outlined against the moonlit sky. Glancing down, I could make out Carson's shape as a deeper shadow against the shadows far beneath, caught a glimpse of his face as a white blur against those shadows as he glanced up toward me. Down—down—still downward we descended, rung after rung, yard after yard, until the mouth of the great shaft had become but a dwindling circle of pale light far above us.

The shadows about us were deepening swiftly as we descended farther into the shaft, and I judged

that we had already climbed down for more than a thousand feet, yet in the deep dusk beneath was no sign that we were nearing the bottom. Down—down—a seemingly endless descent, that became soon almost automatic on my part, an unconscious and unceasing movement of arms and legs that steadily took me further down into the great shaft's shadows. Those shadows had deepened to darkness about us, by then, and by the time that I estimated our downward climb at two thousand feet, we were descending in a stygian darkness in which we could not even see the wall down which we climbed. The great shaft's mouth was now but a tiny ring of pale light far above. Continuing to feel our way, we moved down the ladder until there came a sudden exclamation from Carson, below me, which halted Trent and me.

"The ladder!" he exclaimed. "I've come to its end, and it doesn't reach to the shaft's bottom!"

"The end!" I cried. "Can you see how far the shaft's floor is beneath it?"

"I can't even guess," he said. "This darkness is so thick, it may be one foot or a hundred. And we daren't wait here until the moon comes above the shaft and lights it, for then it will be too late for us to use the projector!"

We hung silent there a moment, a silence akin to despair, clinging there to the ladder, hanging against the smooth wall of the great well whose depths extended for an unguessed distance into the utter darkness beneath us. Then Carson's voice came calmly up to us through that darkness.

"I'm going to let go," he said. "The shaft's bottom can't be but a little beneath us, and I'll take

the chance."

Before we could cry to him to wait, the rope-ladder had twitched suddenly in my grip as he released his weight from it beneath me, and then the next moment had come a light thud, seemingly just beneath. And then, inexpressibly welcome to our strained ears, came the sound of Carson's voice.

"It's all right," he was saying. "The shaft's floor is only a few feet beneath the ladder's end!"

Swiftly I climbed downward, reached the last rung of the ladder's length in another moment, and then for an instant hung from that rung, hesitant. The darkness about me, impenetrable and enveloping, made the space beneath me seem an abyss, but I released my hold, shot downward, and in an instant had struck a hard, smooth floor not a half-dozen feet beneath me. I felt Carson beside me in the darkness, and in another moment there came another thud and Trent dropped down beside us. Then, joining hands so that we might not lose each other in the blackness there at the shaft's bottom, we waited for the coming of the light which would illuminate the shaft. Its mouth far above was a small circle of pale light in the blackness, and it was up toward that circle that we gazed, as we waited. Moments passed thus, moments in which we were aware only of the smooth, hard floor upon which we stood, and then across the edge of the pale circle above there drifted slowly the shining disk of the full moon. As it did so, there poured down into the shaft, reflected downward by the metal walls with surprising strength, a flood of pale light which illuminated, in misty fashion, all things about us.

We were standing at the edge of the level metal floor of the mighty shaft, that floor being a great circle of the same diameter as the shaft's mouth. At the center of this metal floor, taking up almost half the shaft's bottom, the metal gave way to a tremendous disk of smooth black substance, shining, as Carson had said, like black glass, which seemed inset in the floor. On the other side of this disk there were ranged along the floor a regular row of some twenty mighty cylinders of metal, vague great shapes that gleamed dully in the misty light from above. Save for these and for the great black disk, there was nothing visible at the bottom of the great well. The disk glittered brilliantly even in the pale light that filtered down upon it, but there lay over all things else the thick dust of endless centuries.

Carson led the way at once toward the great cylinders ranged at the glittering disk's edge. A hundred feet in diameter each, three hundred in height, they loomed giant-like before us in the misty light. We seemed but three pygmies as we gazed up toward them. They stood upon a narrow, deep slot in the metal floor, perhaps six feet in width, and this slot led across the metal floor and across the black material of the disk to its center. The great cylinders themselves seemed quite without break in their gleaming walls, and to slide open their great tops as the moon raiders had done would be impossible for us. But as we walked around the nearest of them, Trent's quick eyes detected a stud set in its surface, and swiftly he pressed it. At once, smoothly and noiselessly, a square section of the great cylinder's curving wall slid upward, and we could

see that that wall was a yard in thickness, formed of alternating layers of gleaming metal and gray insulating material, shielding its interior from the terrific cold of outer space.

Through the doorway we stepped, and found ourselves in the gigantic cylindrical chamber that was the cylinder's interior. But now we saw that its great flat top and flat bottom, and sections of its curving sides, were quite transparent from within, though opaque from without. At the center of the cylinder's floor stood the only object in it, a solid little pillar of metal bearing on its top a number of small studs. Carson pressed one of these studs experimentally, and the door through which we had entered clicked hermetically shut behind us. He touched another and the cylinder began to move, to slide smoothly and noiselessly along the slot above which it rested, until it had slid upon the black disk, stood at its center, covering almost all the disk's surface!

Carson clicked open the door again, then pointed out through it. There at the great black disk's edge, rising from the metal floor but a few feet from the door of our cylinder that rested on that disk, stood another short pillar of metal, bearing on its top a small metal disk and a white-handled lever that could be thrown down upon its upper surface.

"The switch that turns on the great beam!" Carson exclaimed. "I see it all now. That switch out there turns on the mechanisms beneath which generate the great beam, and whose humming I heard, a humming that lasts for a moment before the beam drives upward. In that moment, after turning on

the switch, I must leap back into the cylinder and click shut its door before the beam drives it upward through space."

"But when?" Trent asked. "How can we know at what exact moment to turn it on?"

"The moon raiders turned it on when the great bell-note sounded," Carson said, "so that bell-note must be the signal that sounds automatically here to mark the moment when the moon is directly overhead, when the beam must be loosed and the cylinder driven moonward!"

Gazing upward, we saw that the silver shield of the full moon was creeping almost across the center of the shaft's circular mouth far above, and Carson strode out to the pillar-switch beside the disk, while we stood at the one inside the cylinder, ready to snap shut the door when he should have turned the switch outside and leaped within. There were no other preparations to make, none that could be made. The great beam of light, which we knew must drive the cylinders out by means of light-pressure, intensified in some way, must drive them at almost the speed of light itself, we knew, and so if we succeeded, our cylinder would be hurled across the gulf from earth to moon within moments, seconds, the speed of light being some 186,300 miles a second and the approximate distance to the moon but 238,840 miles. If we made it, we knew we would make it in seconds, and so would have no need for air-supplies or other special equipment during the moments that we would flash outward.

If we made it! Yet it seemed incredible now, as we waited, that we could do so, that we could

hurtle across the awful gulf toward the calmly shining disk above us. Gazing up toward that disk, waiting with taut nerves for the great bell-signal that would mark the moment when we must drive out toward it, Carson outside and Trent and I inside the cylinder regarded it with pounding hearts. I could make out upon that silver moon-disk the dark blotches of its seas, the *Mare Serenitatis* and the *Mare Nubium* and the rest, the brilliantly shining region about Tycho, toward the lower limb, and the more central dark circle of Copernicus' mighty crater. Within moments more the cylinder in which we stood would be driving out toward that shining sphere with all the pressure of the awful beam behind it. What was awaiting us there? Would our cylinder be shot unerringly upward and into a shaft like this on earth, that would in some way automatically cushion and halt our great flight, or would we crash in instantaneous death against the lunar crags? What strange cities of unhuman hordes awaited us, what hopeless search for our captured friend?

Tensely, silently, we waited, and I think now that those moments of waiting were the most terrible of all, those moments in which we waited for the signal that would send us flashing out with all the great beam's awful power and speed into that gulf, where never men had flashed before, into that great void of airless space between earth and moon. Nearer the moon's circle was creeping toward the center of the cylinder's transparent top, above us. Carson's hand was tightening on the great switch outside, the switch that we knew would be thrown automatically back again

after our cylinder had been shot forth by the beam. My own hand was on the stud that closed the mighty cylinder's door, and tensely through that door I watched Carson outside. And nearer—still nearer—toward the center of the circle of pale light far above crept the shining moon. Creeping steadily westward still—nearer—nearer—*Clang!*

The mighty note rang suddenly out from somewhere far beneath us, mighty, compelling, like the note of an inconceivably titanic bell, and at the same instant Carson snapped down upon the little metal disk's top, the white-handled lever in his grasp! There was a tremendous clear humming from beneath, and as it sounded, Carson leaped toward us, through the cylinder's door, which a moment later snapped shut as I pressed on the stud I held! Then the next moment blinding, dazzling light was stabbing up from beneath and all about us, a colossal ray of inconceivable brilliance that seemed to grip the cylinder, to stab upward with it in its grasp at velocity inconceivable, all things that we could see vanishing instantly from about us, save the moon's bright disk above. Our moment had come at last, and at almost the speed of light itself we were flashing out into the void of space toward that disk—out from earth to moon!

Chapter V

The Other Side of the Moon!

Never are the following moments more to me than a swift succession of lightning-like impressions. At the instant that the beam had shot upward with our cylinder we had been pressed against the floor for

a split-second with enormous force, and then that pressure had as instantly lessened. That instant of pressure passed almost unheeded by us, though, because at that terrific moment all was to us but a mighty blaze of brilliant light that flooded about our cylinder and through its transparent floor and windows as we flashed up and outward. Clinging to the central pillar on the cylinder's floor, Carson and Trent and I were aware for that first instant only of the blinding ray that had caught and flung us outward, and then in the next flashing moment I had seen the moon's bright sphere swiftly growing in the black heavens before us!

Thrilled through and through every atom of my body by the awful velocity at which we were racing through the void, brain whirling as we clung there to the pillar, I glanced back and below us, caught for an instant through the brilliance of the great beam the dark, dwindling shape of a brown sphere that I knew was earth, with to one side and beyond it the blazing disk of the sun, adorned with vast streamers of flame and blazing toward us through even the blinding brilliance of the great beam! Beyond and all about us, too, I had a momentary impression of thousands of stars, brilliant, terrible, burning with undimmed splendor there in the awful void through which the cylinder that carried us was leaping at almost the speed of light!

All of this, the wild flash outward with the great beam about us, my glance ahead and behind, all had taken but a moment of time, and then, even above the wild thrumming sound which our cylinder gave forth beneath the awful pres-

sure of the beam, I heard a hoarse exclamation from Carson who clung there beside me, turned my gaze upward to see that even in that single moment that we had been flashing outward, the moon's great sphere had grown to giant proportions before us, filled now a third of the heavens, a half, two-thirds! A huge world it turned before us now, leaping closer and growing larger with inconceivable rapidity. I caught a glimpse of the vast dark upper plains of its great seas, the brilliance that flared toward us from about Tycho, the great towering ranges of the Carpathians and the Apennines, all growing enormous, with the passing of each fraction of a second that we hurtled toward them! Then straight before us, at the center almost of the great moon-disk that now filled all the heavens before us, I discerned a gigantic circular crater whose awful towering walls formed a colossal ring miles high and dozens of miles across, a giant jagged crater toward the center of which our cylinder at all its immense velocity was rocketing!

"Copernicus!" It was Carson, shouting in my ear in that mad moment. "We're going to smash inside Copernicus' crater!"

Even as Carson cried out there beside me, the jagged floor of the mighty crater seemed to be rushing lightning-like toward us, all the brilliant, bare and savage outlines of its rocky surface photographed upon my brain in that instant, and then the crater's floor was full before us, looming like a giant wall before us as the cylinder rushed at its awful speed toward it! I knew it was the end; in that wild moment, we seemed to cling there and stare fascinated toward it in

that instant that we rushed to death. And then, in the brilliant-lit rocky floor of the great crater just before us, in that giant wall across our path, a tiny black dot had appeared, a dot that in even the fraction of a second that I had caught it, had grown swiftly to a great black circle, the opening of a great shaft in the crater's floor, a shaft whose black mouth loomed for an instant full before our flashing cylinder, and then into which our cylinder had hurtled, and into the dark depths of which we were racing on at the same terrific speed!

On—on—it could hardly have been for more than a moment that we flashed on through the great shaft's dark stygian depths, with our great driving beam brilliant still beside and behind us, yet that moment seemed to us to be a time of unmeasured length. The thought flashed across my spinning brain as I clung there, that we



were speeding into the very bowels of the moon, on through that great shaft. I had a lightning-like vision of tremendous, rocky, cavern-like spaces through which we clicked like light, spaces illumined for that split instant by the brilliance of our great driving beam, and then seemed to see before us, across the shaft, a great metal barrier which with the speed of light itself split open before us and closed shut behind us. Then I was aware simultaneously of a point of brilliant light in the darkness ahead, a point that even as I saw it had grown and seemed to rush toward us with a speed as great as our own, a giant beam of brilliant light-force like that which drove us on, and which in the next instant had met our flashing cylinders, blinding us completely for an instant by the dazzling glare from the great beams ahead and behind!

Then we were aware suddenly that the cylinder was slowing with unbelievable quickness and yet smoothly and noiselessly, was slowing as the beam that drove us forward was opposed and balanced by the beam that drove toward us from ahead! The brilliance about us was lessening swiftly, and as we opened our eyes and looked forward, we saw that the cylinder was gradually decreasing its terrible speed; we could see another point of white light ahead, a soft white light utterly unlike the brilliant beams. Toward that point the cylinder swept smoothly, and then as the point loomed and grew before us, the cylinder had plunged suddenly up from the shaft into it, up from the shaft's dark depths into a great space lit with soft white light! We saw before us a great black-glittering disk, set above

us, that seemed very familiar in appearance, saw a great framework of metal girders set beneath that disk, which seemed imbedded in the great room's ceiling. Then the cylinder had swept up into that framework and had halted against the disk. There was a great clicking of metal from the framework about us, and our cylinder hung motionless, suspended beneath the disk. Our terrific journey was ended!

Carson was the first to stagger to his feet. Half consciously, I heard his voice, and then Trent and I released our grip upon the pillar's metal hand-holds to which we had clung, and staggered up beside him. He was gazing eagerly through the transparent sections of the cylinder's sides, and now as we gazed out with him, we saw that the cylinder hung in that great metal framework from the ceiling of a great chamber of vast proportions. That chamber, cube-like and with sides and floor and ceiling of metal, was more than a thousand feet wide and long, and was lit by circles of soft light inset here and there in walls and ceiling. At the center of its floor there yawned the black circular opening of the great shaft up which we had come, and above which the cylinder now hung. Just above that shaft, and above our cylinder, was inset in the chamber's ceiling the great black-glittering disk we had been watching, and beneath which our cylinder was suspended.

I knew it had taken us only moments to flash across that titanic gulf through which we had come, though our swift-succeeding and unforgettable impressions in those lightning-like moments had made it seem much longer. I remembered now, though, as with Carson and Trent I gazed forth in awe, that

when we had first flashed into that great shaft in the moon's side, in Copernicus' crater, we had seemed to be driving straight forward, but that when we had shot up into this soft-lit chamber, we had seemed to rise straight upward. It came to me, though, that our direction was the same but that our sense of direction had changed as we had reached the moon and our terrific speed had lessened at the great shaft's end. Nor did I doubt longer the way in which our awful velocity had been lessened and halted so swiftly, knowing that our cylinder's approach had somehow automatically turned on an opposing beam from the black disk before us, which had swiftly neutralized the drive of our own outward beam and had slowed and halted us here. These things, though, flashing across my mind as they did, were yet nothing to it at that moment, beside the intent interest that held us as we gazed eagerly forth from our cylinder, through the transparent section of its sides.

"Cylinders!" Carson was exclaiming. "Cylinders like this one—and in hundreds!"

We turned to the place from which he was gazing, and then saw that at that side of the vast chamber in which our cylinder hung, there was a great corridor or passage-way opening from its wall, and that in that mighty passage stood a great row of huge cylinders like our own, a row that led directly to the framework of metal in which our own hung. It was apparent that these could be moved forward at will into that framework, and shot by the disk through the great shaft to our earth, and as I saw that, a sudden chill

passed over me, a wave of fear that was not for myself, but for my world. With these cylinders massed here, extending back into that great corridor in unguessed hundreds, thousands, perhaps, what great invasion of earth did not their silent presence here portend? I had a momentary vision of them flashing down to earth from the disk above us, hundreds, thousands of them, filled with tens of thousands of the great flying-circles, and a countless horde of the monstrous creatures who had gathered them here!

But that swift vision passed from me in the excitement of the next moment, for Trent was pointing now to a narrow little metal bridge that led from our cylinder's door to the floor of the room, and to the edge of the circular abyss above which we hung. We could see at the great room's far end, too, a metal stair that led steeply upward, and afire with eagerness gazed out toward it. I think that in that moment we all believed ourselves somewhere in the moon's interior, since there was no natural light about us, only the soft glow of the inset circles. We knew, too, that in the moments before our cylinder had halted, it had flashed for a great distance into the moon's heart through the great shaft, and now were eager to discover our whereabouts. I turned swiftly to Carson.

"There must be air in this great room!" I cried to him. "For this must be where the moon raiders left their cylinder!"

He gazed doubtfully forth. "If there were air here it would rush down that shaft," he objected, "out through it into the void of airless space—instantly."

I shook my head. "Didn't you see the great metal barrier or door across the shaft, that split open before our cylinder and closed behind us as we flashed on?" I asked. "That must have been a great gate or valve that opened automatically at our coming, and closed behind us, a valve that keeps the air here from rushing out as you say."

He gazed forth a moment still, perplexed, then silently nodded and turned toward the door-stud. As he placed his hand upon it, we waited tensely, silently, for we knew that if there were no air outside, or if there was but air of great rarity, we would die within the next few moments. But Carson pressed the stud without hesitation, as the great door clicked upward in the cylinder's side we stood motionless. As there came no rush of air either outward or inward, we turned, gazed at each other with eyes alight, then turned toward the door. A moment later holding to the cylinder's side so that our efforts might not send us soaring upward by reason of the moon's weaker gravitational power, we stepped out upon the little bridge outside, the air without seeming exactly like that within. But as we stepped out, we stopped short on the bridge, astounded.

For the steps we had taken had been the same as though taken on earth! Knowing that because of its smaller mass and weaker gravitational power that our weight should be but one-sixth its normal figure on the moon, we had expected from the first plans of our trip to have to overcome this disadvantage. Had half-expected, even, that the sudden and great change in gravity would prove our deaths at once, since such a change might be expected to have fatal results

upon the body's internal organs. We had counted upon taking that chance, though, had braced ourselves as we made our first moves outward from the cylinder against the weaker gravitation we supposed to exist, and now we had found that that gravitation, apparently, was exactly the same as on earth!

"The gravity!" Carson was exclaiming, startled more than by anything that had gone before, as we all were. "It's the same as on earth—yet it's impossible!"

A thought flashed across my brain. "The moon raiders!" I cried. "You remember you said when they came to earth they walked about on it as though quite used to its gravitational power!"

Carson nodded quickly "They did," he said. "And we know the reason for it now. Yet how can the moon's gravity be the same? It's against every law of science!"

But now, even though stunned by the inexplicable equality of the moon's gravity with that of earth, we were gazing eagerly about us. The steep metal stair we had caught sight of from the cylinder lay before us, and as we looked upward we saw that it led up to the great chamber's ceiling, and further upward and outward through a great circular opening in that ceiling, an opening through which we could see a vast, dim-lit space above a gleaming far above it that puzzled us. Without words, moving like men in a dream, we strode to that stair, were climbing up its steep slant, up and up until we were almost to the opening, could see more of the mighty space above, could hear a faint sound of throbbing that was beating in our ears from somewhere above, and that came and went.

Hearts pounding, we slowed our upward climb now, moving more stealthily toward the opening just above. As we neared it we saw, set at the edge of that opening, a short metal pillar, which seemed familiar in appearance. Carson pointed to it, whispering, "The switch of the great disk on the moon!" I nodded. It was a duplicate of the switch on earth; a small metal disk mounted on the pillar with a white-handled lever swinging at its edge. But this lever, I noticed could be swung not only to the metal disk's lower side, to send the great beam driving downward, down through the great shaft to earth, but could be swung to the metal disk's upper side, too. Could it be that the great beam here could be driven upward, too, from the disk's upper side? Only momentary was the wonder that flashed across my brain, as we stole upward past the great switch, for none of us dreamed, then, of the cataclysmic thing that was to take place upon these steps, at that great switch which we passed unheedingly.

Upward we crept, Carson ahead' Trent and I just below him, and then as his head came above the last step, as he peered forth into the great space above, gazed about and upward, I saw a look of awe come on his face, awe and amazement inexpressible, as though his eyes gazed upon something which his brain refused to credit. Staring forth, it was as though for the moment he had forgotten the existence of Trent and myself, and we glanced toward each other, and continued to creep silently after him. We reached him, raised our eyes carefully above the level of the last step, above the edge of

the great opening in the big chamber's ceiling. Then, as our eyes too took in what lay about and above us, we too were stunned into unbelieving silence.

We were gazing out into a great space whose very dimensions and existence were incredible to us, a far-reaching vault of space that extended, lit with soft white light, as far as the eye could see. The first thing about it which caught and held our eyes was that which lay above it, a great vault of blackness, of night, in which burned the familiar stars, yet which seemed closed out from the space about us by a barrier that we could scarcely realize, a gleaming yet transparent material that stretched far away, over all the great space about us, and that was only visible by reason of the light dimly reflected upon it from beneath! A titanic, unbelievable transparent roof, stretching away as far as the eye could reach, miles above the great space that surrounded us, closing in that space from the blackness of the outer night and from the burning stars!

Our dazed eyes, moving from that gigantic transparent roof to the vista about us, we saw that there stretched away in all directions to the horizons a smooth level plain, a great plain that was covered as far as the eye could reach by buildings! Buildings of metal, buildings like none that man had ever looked upon before, surely; buildings that towered for thousands of feet, many of them, through the dusk toward the transparent roof far above! Buildings that were many-sided, angle polyhedrons, that were like great faceted diamonds of metal, that were like giant metal crystals ranged in rows and streets!

In their angled, faceted sides were set circles of soft glowing white light, light that changed this lunar city's night into a dim, twilight dusk.

And that strange, great city swarmed with life! For here and there across and above it there fitted smoothly in ceaseless swarms scores and hundreds of great flat circles, throbbing from building-roof to roof, circles upon which we could see dark figures. Figures erect and bulbous, their bodies cased in shells, their short limbs ending in webbed and taloned paws, their great heads reptilian and tapering, borne on snake-like necks! Turtle-figures, turtle-men like those who had raided down to earth in one of their great cylinders on the mighty beam, and into whose city we had won, at last, in our search for Howland! Far away reached the crystal-like buildings of that city, the streets between them swarming too with turtle-creatures, but in the mass of those buildings lay a great central plaza, or circular clearing, in which was the great opening through which we gazed. And set in the metal floor beside our opening, we saw, was the black-glittering upper surface of the great disk, the disk whose lower surface was set in the ceiling of the great chamber beneath us. Could it be, then, I asked myself, that my inference on seeing the switch had been right, and that the giant beam was shot upward from this great disk's upper side also? But that was but a passing thought across the stunned awe that filled us now as we gazed forth.

"The city of the moon creatures," Carson was whispering, as we gazed out. "The city of the moon creatures, and it is here where we never

dreamed that it might be—on the other side of the moon!"

The other side of the moon! For we saw now, knew now, that it was there that this city about us lay, it was there that we now stood. Our great cylinder, flashing into the mouth of the great shaft there in the crater of Copernicus, had rushed on at its titanic speed through the moon's depths, not halting in those cavernous depths as we had thought it might, but going on through the moon itself, to its other side! Flashing on to this other side that never had been seen by anyone on earth, turned always away from earth as it was, and that yet held upon its surface this giant, transparent-roofed city, whose masses of colossal angled buildings, held within it the unguessed-myriads of the turtle-creatures' hordes, stretched all about us as far as the eye could reach! For it was here that the moon creatures had existed—for how many ages?—unsuspected by any on earth. They had pierced their great shaft down from this side through the very center of the cold moon itself, down and out the moon's earthward side, so that their cylinders might be driven by the great disk's beam down and out that shaft, through the moon and across the gulf to earth, just as our cylinder from earth had been driven lightning-like out toward the moon's earthward side and through the great shaft there to this other side, straight through the moon!

And in this mighty city about us, this great turtle-city that lay now beneath the darkness of the moon night, two weeks long, even as the moon's earthward side lay in the lunar day of two weeks,

the moon-creatures could change their night to dusk, at least, lighting it by their great glowing circles inset in their buildings. Shielding it from the awful cold of space, from the airless void, by the giant transparent roof far above it, which we knew must cover all the moon's far side, a great air-tight shield which made existence here in their city possible by means of an artificial air supply. For well we knew that without that shield above it the air about us would rush forth into the void instantly and leave this far side of the moon as dead and cold and barren as the earthward side! Here in their great shielded, air-tight city on the moon's one side dwelt the turtle-hordes, yet why had they built this city upon one side alone, upon the side never seen by earth?

Before my whirling brain could suggest any explanation of this, though, Carson had gazed about, had drawn himself up through the opening to stand upon the surface of the great plaza itself. No turtle-shapes could we see through the dusk upon all that great clearing, though in the city's streets that we could glimpse through the dusk we could see great masses of the turtle-creatures moving busily to and fro, hordes of flying-circles that throbbed to and fro over the city and from building to building. Standing there in that strange soft dusk, shielded by it from the eyes of the turtle-creatures in the city about us, whom our own earth-sharpened eyes, accustomed to the deeper natural night of earth, could easily make out, we paused. Gazing with awe about us, at the giant shapes of the great buildings looming in the dusk all around and beyond us, we came back suddenly

to realization of our own purpose as Carson turned toward us.

"Now is our best chance to search for Howland in this lunar city!" he exclaimed. "For with this dusk lying over it we have a chance to evade the turtle-creatures for a time, at least, to escape discovery long enough to find some trace of Howland!"

"But where would they take him?" asked Trent. "This city must stretch over all the moon's far side, and how can we find him in it?"

"It's our one chance to do so, in this dusk of the lunar night!" Carson declared. "Twenty-four hours from now earth will have revolved again, so that its shaft there in Yucatan will be in line with this shaft down through the moon, and when that occurs we must go back—back to warn our world. But during those twenty-four hours there is a chance, a million to one chance, I admit, that we may be able to find Howland here, to escape discovery by these swarming turtle-creatures, and to take him back with us!"

"But to venture into this city around us—these streets crowded with turtle-creatures—is death!" I exclaimed. "Even now it is a miracle, that even through this dusk we haven't been discovered on the plaza, at the city's center!"

"We must risk it," Carson said. "Some of the streets in the city around us, you can see, are hardly used by the turtle-creatures, while others are swarming with them. Well, if we can make our way through these comparatively deserted streets, in this dusk, we can perhaps evade the turtle-creatures long enough to find some clue to Howland's fate."

Gazing about us again, straining

our eyes through the dusk across the great plaza's surface, we could see that Carson was right and that some of the narrow streets that branched from that plaza were almost empty of turtle-creatures, while the other and broader ones were filled with masses of them, apparently most of them carrying with them tools or instruments of one sort or another. All this we could only perceive as through a misty screen, through the dusk that lay unchangingly over all this lunar city. Yet we were puzzled by the fact, thankful as we were for it, that no turtle-creatures moved upon or across the great plaza at whose center we stood. It was evident, to us, after a moment's thought, that only those came out on the plaza who wished to reach the chamber beneath it, through the opening by which we stood, and as none were desirous, apparently, of reaching that great chamber now, the great plaza was deserted.

Pausing there, peering about, we stood for only a moment longer, and then Carson, with a silent gesture, was leading the way across the plaza, through the soft thick dusk toward its edge, toward one of the narrow and almost empty streets that branched from that edge. Before us as we moved on, hearts beating rapidly with every step, the gigantic crystal-like building loomed larger, and to our ears came louder the sounds of activity from the thronged broader streets, the deep bass note of many turtle-voices, the trobbing of many flying-circles that sped past in the dusk high overhead. Even through the shrouding dusk it seemed impossible that we could move nearer toward the great buildings without being discovered, but Carson was

leading the way straight toward one of the narrower and emptier streets, a mere crevice between the great towering metal buildings, and once we reached its deeper shadow we might elude the creatures without great trouble, I knew. On we crept through the dusk toward it, then suddenly flung ourselves flat, as a flying-circle throbbing by overhead dipped suddenly close toward us!

Lying there with pounding heart, it seemed impossible that we had not been seen by those on it, but in a moment it had passed, and with the next moment we were up again, moving on through the dusk toward the deeper dusk of the narrow chasm-like street that opened through the looming buildings before us. We were almost at that opening now, but a few yards from its welcome deeper shadow. We were within yards, feet of it, of the great plaza's edge, when we stopped abruptly and recoiled! For into that narrow opening just before us, from one of the great buildings beside it, had emerged a dozen or more dark, upright forms conversing in deep bass tones that came clearly to us through the dusk, and moving straight toward the great plaza's center and ourselves! Dark, bulbous turtle-forms, who, before Carson and Trent ahead or I behind could leap back, were within yards of us. Grotesque great shell-cased creatures who stopped short as they caught sight of us, stared toward us for a moment with lidless eyes, and then were rushing forward upon us!

Chapter VI

The Battle of the Flying-Circles

As the dozen or more great turtle-

creatures ahead rushed toward us, I seemed to stand for a moment in a stunned paralysis of inaction, then saw Carson's automatic leap from its holster, heard the swift crack of it and saw two of those onrushing creatures stumble and fall! saw another collapse as Trent's gun spoke in his hand. My own pistol was now in my grasp, and I was leaping forward, hearing from all about the great plaza and all across the giant city a sudden wave of sounds of alarm. But before I had leaped more than a step forward, Carson had cried out to me over his shoulder.

"Back, Foster!" he cried. "They've got us, but you can get away! It's the only chance now for Howland and us—for one to stay free!"

Even in that agonized moment, as the great turtle-creatures rushed forward unchecked upon Carson and Trent ahead, I knew that Carson's cry was truth, that if we all were captured there would be no chance, but that one might save the rest, might escape back from moon to earth to warn our world, at least. I stood hesitant for an instant, pistol in hand, torn by my desire to rush forward beside my two friends, and then had turned, and was running backward through the dusk across the great clear plaza's surface, back toward the opening in it up through which we had come. Behind me I heard the crack of the automatics of Carson and Trent suddenly cease, heard a quick scuffling, a babel of deep-toned cries and hoarse shouts, and knew that the moon-creatures had rounded up my friends. From all around the great plaza it seemed that other moon-creatures were pouring forth from the mighty buildings in answer

to the alarm, and at top speed I ran on through the dusk toward the great opening through which we had come.

A moment more and I was at that opening, but now I could discern, far across the plaza through the thick dusk, a half-score of great turtle-forms that were running toward it! They had not as yet caught sight of me, I knew, but as I flung myself down the metal stair into the great cube-chamber where our cylinder still hung suspended above the abyss of the great shaft. I knew that within minutes they would reach that chamber. Frantically I gazed about for some place of concealment, but in the great, metal-walled and white-lit room there seemed none. I jumped to the bridge that led to the open door of the suspended cylinder, some wild idea of hiding in that cylinder flashing across my mind, but as I reared the bridge I stopped, gazing up at the mighty metal girders about the great cylinder, which supported it there, beneath the disk and above the shaft's circular abyss. Two of those giant girders crossed at right-angles just above me, and in the next moment I was clambering upon them, lying along the horizontal one and praying that its broad surface might shield me from the gaze of any one beneath. Hardly had I reached that precarious place of concealment, the dark mouth of the bottomless shaft down beneath me, when there burst into the great room from above a group of a dozen turtle-creatures!

All, I saw, were armed with half-hemispheres of metal like those Carson had described to us, containers of the deadly green vacuum ray, and I held my breath as they

burst down the stair, calling to each other in deep tones and gazing eagerly about the room. None looked up toward the great girder on which I lay prone, and they seemed reassured by the emptiness of the great place. For a few moments they conversed in their strange vibrant tones, glancing about them, a dozen inconceivably strange great shelled turtle-creatures, and then as one of them glanced toward the cylinder that hung suspended beside me he uttered something and all moved toward it, to cross the bridge just beneath me.

As they came across that bridge, halting beside the cylinder's open door and peering within with hemispheres ready, I could have reached down my arm and touched the tops of their great reptilian heads, so close were they beneath me. I hardly dared breathe; I lay with muscles tense, yet with an intolerable desire to shout aloud, as they conversed there for a moment more, inches only beneath the great girder on which I lay. Then my tension relaxed as they turned to go. Hope rising in me again, I saw them turning to go across the great chamber and up the narrow stair, but then saw to my dismay that one of them had remained there in the big room, one who held his vacuum-ray hemisphere still in his grasp and who was obviously a sentinel left on guard! Despair rushed across me again as I saw the others leaving, passing up the stair and out the great opening into the plaza above, while the single one remaining paced about with lidless eyes alert, as watchful as ever.

A myriad plans of escape flashed through my brain as I lay there, yet all seemed hopeless while that guard remained beneath me. At

any moment I might be discovered by him, I knew, and then a flash of the deadly green ray would put an end to my existence before I could make a move. Yet somewhere in the mighty city about me, living or dead, were my two friends who were willing to sacrifice themselves to allow me to escape, and I knew that unless I could win free and find Carson and Trent soon, and with them make our search for Howland, the twenty-four hours, at the end of which we must flash back to warnearth, would be gone. Racking my brains for some expedient. I finally chose the most desperate, for I dared not make use of my pistol. It was a slim chance, to be sure, but putting my idea into operation, I reached forth and rapped sharply upon the side of the giant metal cylinder suspended beside the girder on which I lay.

As the resonant sound of my rapping broke the stillness of the great chamber I saw the turtle-guard, at the other end of the great room, turn instantly, with 'hemisphere upraised, gazing toward the cylinder. Then quickly he was coming across the great floor toward it, toward the little bridge of metal that jutted out from the great shaft's edge to the cylinder's open door. He came slower as he reached that bridge, standing there at the very edge of the abyss and gazing forward into the cylinder with ray-container still ready for action. Silently I gathered myself, and then as he stepped just beneath the great girder on which I was, I threw myself down upon him!

Even as I had leaped down upon him the sound of that leap had brought his deadly hemisphere flashing up toward me, but he was a moment too late, for in the next instant I was upon him, had crumpled

him down to the surface of the little bridge, and we were struggling madly upon it. Gripping each other with the utmost of our powers, we struggled there upon that narrow little strip of metal, and beneath us was the mighty depths of the giant shaft, that led down through the whole sphere of the moon itself! Twisting, turning, with the turtle-creature who gripped me striving above all else to bring his hemisphere up against me, while I strove to prevent it, we rolled there on the little bridge in as silent and deadly a conflict as I have ever experienced. Endeavoring in vain to get a hold upon that grotesque, shelled body, I felt my strength leaving me fast; I felt the great paws that held me dragging me inch by inch toward the bridge's side, toward the abyss!

Another moment and we were rolling at the very edge, and then I felt myself being drawn irresistibly over that edge by the great limbs that held me, saw beneath me, as though from a great distance, the black depths of the great shaft into which I was being propelled.

A sudden mad frenzy of strength surged through me at the sight, a wild accession of sudden strength with which I thrust blindly out at the monster who held me. That fierce thrust, unexpected as it was to him, knocked him suddenly away from me, to the very edge of the bridge, and then he was toppling over that edge, hurtling down into the great shaft's depths. A deep wailing cry came up to me for a moment, and then all was silence!

I stumbled to my feet, across the bridge and to the solid metal floor of the great chamber, toward the stair that led upward. But before I had taken a half-dozen steps

I stopped once more and gazed upward. From above had come a growing throbbing sound, a throbbing that was rapidly increasing in intensity, that was nearing me! Only an instant I heard it and then saw, through the great round opening from high above through the dusk. It was one of the great flying-circles, and it was coming straight down toward the opening above me, straight down toward the great chamber in which I stood!

Spellbound with horror I stood there for a moment as the great dark shape swept downward, and in that moment it had reached the great opening in the ceiling, was floating smoothly down through it. But as it did so I had turned, had leaped backward. I knew even in that moment of deadly peril that I had no time to reach my former place of concealment on the girder, that I would be seen before ever I could reach it. The great suspended cylinder lay before me, its open door just across the little bridge on which I had battled, but neither could I take refuge in it, and for an instant I stood in an agony of indecision. Then even as the great flying-circle shot down into the big chamber I had made my decision, had leaped to the edge of the great shaft before me and had lowered myself swiftly over that edge, hanging from the rim of the abyss with all its terrific depths beneath me, and with only my fingers now visible on the rim to which I clung!

Even as I had lowered myself into that desperate place of concealment, I had heard the great flying-circle sweep down through the opening above, to the great chamber's metal floor, coming to rest there with its throbbing of power



*But before I leaped
more than a step for-
ward Carson had cried
out to me over his
shoulder*

ceasing. I heard the deep vibrant voices of turtle-creatures then, many of them by the sound, as they emerged from the flying-circle to the room's floor, and I prayed that they might not see my clutching fingers there on the great shaft's rim, since a slight push would send me hurtling down into the awful depths beneath me after my late antagonist. The creatures above seemed to halt upon emerging from the flying-circle, and I heard one passing across the narrow little bridge to my right, peering into the cylinder, apparently, and then returning without having seen my clinging shape in the shadows of the great shaft's depths. But now my hands seemed going numb with the strain of holding me there from the shaft's rim, and I felt my grip upon that rim slowly slipping!

There was an agonized moment in which the turtle-creatures above conversed in their deep tones, while my grip continued to relax in spite of all the efforts of my will. I knew that a moment more would mark the limit of my endurance, would see me hurtling downward, but as I gave up all hope, I heard the sound of heavy footsteps on the metal floor above, and I knew that the turtle-creatures were moving around the great shaft to the room's opposite side, were passing apparently back into that great corridor which opened from it and in which the long row of cylinders was ranged. Hardly had the sound of their voices receded into that corridor than I was endeavoring to pull myself up over the rim from which I hung. For a moment my numbed muscles refused to obey the commands of my will, my aching limbs seeming incapable of further effort, and panic shot through me as I found myself

unable to draw myself up. That very panic, though, served to spur me to a greater effort, and at last with a wild convulsion of my muscles, I had scrambled up over the great shaft's side and lay panting beside its edge.

For a while I lay there in utter exhaustion, then staggered to my feet. The great flying-circle of the turtle-creatures lay on the big room's metal floor not far from me, but none of the creatures themselves were in sight, all having passed into the corridor on the other side, from which still came the faint vibrations of their voices. I sprang across the room, toward the stair that led upward, but at the foot of that stair I halted, gazing back toward the silent flying-circle, a sudden thought occurring to me. Could I but operate that flying-circle it would enable me to make a survey of the great moon city, which I could accomplish in no other way. Afire with the idea, I leaped back toward the great craft.

It was simply a great flat circle of smooth metal, a low retaining wall of metal perhaps a foot high around its edge. The circle, like all the others I had seen, was fully a hundred feet in diameter, and at its center was the mechanism by which it was propelled. This mechanism, whatever its nature, was cased in a low flat cylinder or raised circle, upon the top of which was a bewildering series of studs, and oddly-charactered dials, all grouped about a single central upright lever or handle. I flung myself down beside this switch-cylinder, pressed swiftly upon the studs in turn, but without result. The voices of the moon-creatures, back in the great corridor, seemed nearer, louder, now, and I knew that they were returning, would in a moment more be emerging

into the great chamber, so frantically I pressed and twisted at the studs before me. Then as my fingers fell upon the studs in a certain order, something clicked beneath them and there came instantly a smooth, powerful throbbing from the circle's mechanism. At once I grasped the central handle, and as I did so, felt the circle rising smoothly up from the floor toward the ceiling, a section of the circle at the center being transparent for downward vision.

A moment's experiment showed me that the central handle was the one control of the circle's direction, the great disk veering to whichever side that handle was inclined, descending when it was pressed downward and rising when it was pulled upward. Clumsily I guided it up toward the great opening in the ceiling, maneuvered for an instant beneath that opening, and then had risen up through it, my great circle throbbing smoothly upward into the dusk above the great moon city! All about me there stretched into the thickening twilight that seemed never to change the great masses of the strange faceted buildings, seeming as I soared up above them like giant crystals of metal, angled and regular-sided, cast down into geometric, neat formations. I could glimpse through the dusk many other flying-circles that were coming and going from roof to roof of the great buildings, but for the moment paid these small attention, sending my own circle soaring across the great plaza beneath me to the spot where I had last seen Carson and Trent.

As I reached that spot, I halted the circle's progress, hanging motionless a few hundred feet above the plaza's smooth surface and gaz-

ing down toward it. Nothing lay beneath me, though, but the smooth metal, stretching away to the great buildings at the plaza's edge. There was no sign of Carson or Trent beneath, no loitering turtle-creatures, even, and it was with heart sick with despair that I gazed about on every side in search of them. Nowhere were they to be seen, no shapes were moving across the great plaza, though masses of the turtle-shapes moved in the streets of the city about me, and swarming circles throbbed by all about me in the dusk of the lunar city's night.

Despairingly I stared around, for where in this mighty, dim-lit city could I hope to find my friends? The proverbial needle and haystack seemed easy beside my own problem, but I knew that never could I rest until I had discovered my friends' fate. I had seen no bodies or blood stains below, so it seemed logical to hope that they still lived. Grasping the control of my flying-circle again, I sent it slanting up above the great city again, out now over its strange massed buildings and swarming streets at a height of a hundred feet or so, peering down through the dusk at buildings and streets for some trace of my missing friends. Nothing could I see of them, nothing but the giant buildings, inset circles of glowing light and small triangular windows alternating in their sides, the metal streets below in which the hordes of the turtle-creatures surged with their never-ceasing gathering of instruments and materials, their great preparations that seemed never to end. Down among the buildings I slanted now and then, hanging beside their small triangular windows and peering in-

side, but the darkness of their interiors baffled me, made me slant upward again.

I continued to drive across the city, peering down into it with the hopelessness of my search growing more and more complete. From the turtle-creatures who moved in masses below me I had no fear of discovery, but the flying-circles that swarmed thick about me. I twisted and turned unceasingly to avoid, knowing that if those creatures on them discovered my human form through the dusk, it would mean the end. But the turtle-creatures on those swarming circles ignored me.

The city, I could see now, stretched from horizon to horizon, covering all the moon's far side, without a break. Long before the great plaza and its opening had vanished in the dusk behind me, but still far above I could see the faint gleaming of the mighty transparent roof which shielded this air-tight lunar metropolis from the airless void of space. Through that roof, and through the dusk beneath it I could make out the familiar stars, the great constellations unchanged in form or position, and the sight sent a poignant earth-sickness sweeping through me for an instant. Then I snapped back to sudden attention, fear stabbing me in the next instant, for a great flying-circle which I had not seen approaching had swept only a score of feet above me!

I turned, saw it soaring on a little distance behind me, then saw that it had stopped, turned, and was coming back toward me. The turtle-creatures on it had seen me! Straight toward me it was flying, but in the next instant I had grasped the control of my own circle, had

sent it zooming upward, throbbing with power, up over the city at a greater height and away from the following circle. Upward I shot steeply, clinging to the circle's center, and then as I glanced back saw that the other circle was following, was slanting up after me with the dozen turtle-creatures upon its surface plainly visible to me, gazing toward me as their craft shot up on my track. They were pursuing me!

Something of panic filled me as I realized the fact, but I gripped myself, sent the flying-circle on which I crouched slanting higher, higher until the city beneath was fading from sight in the thick dusk. Yet the pursuing craft came on, and because its drivers could maneuver it more skillfully than I, was rapidly overtaking me! Up and outward, up until the great massed buildings beneath had passed completely from sight in the dusk, pursued and pursuing circle fled, my heart racing as the gap between us steadily lessened. It had been my hope to lose the pursuing craft in the dusk, but turn and twist as I might, I could not shake them off, and rapidly they were drawing within yards of me. I could now see the gleam of the gigantic transparent roof, not far above, and knew that in my flight I had risen far above the moon city, was almost against the great roof. Then, just as I turned to glance back again toward the pursuing circle close behind me, I saw a great ray of misty green light, driving straight toward me, from a large hemisphere set at that circle's edge.

Instinctively, in that instant, I jerked the handle in my grasp, sent my flying-circle rushing sidewise to avoid that misty ray.

The next instant the green ray had struck through the air where I had been, and as it did so, the sharp thunder of a great detonation sounded in my ears, while my fleeting circle reeled beneath a swift and sudden rush of air about me! I knew it was the deadly vacuum ray that Carson had seen, the green ray that destroyed all atmosphere about what it struck, creating a perfect vacuum by annihilating the air in its path, and thus slaying any living thing within its range by that vacuum. Even as I had rushed sidewise, through, to avoid that deadly ray, the pursuing turtle-creatures had swerved their racing circle likewise, and in another moment another shaft of the green ray stabbed toward me.

Again I swerved, dipping downward, but this time the misty ray had driven past but a few feet from my circle's edge, and the resulting stunning detonation beside me had all but upset my flying craft. Clinging desperately to its controls, twisting and turning in a vain effort to escape these merciless pursuers whose deadly shafts were flashing about me, I felt my blood rising in swift, burning anger, looked swiftly about and then saw that at my own flying-circle's edge was attached one of the big metal hemispheres like that from which they loosed their ray. I saw, too, that on the side of the switch-case before me was a green stud that I had not noticed before, and with sudden resolution I swerved my fleeing circle swiftly about upon my pursuers, the hemisphere on its edge turned toward them, and then pressed the green stud. At once there leaped back from the hemisphere at my circle's edge a shaft of misty green light, stabbing toward my pursuers

and past them at a short distance. As the sharp thunder of its detonation came to my ears I saw the pursuing circle dip and reel suddenly as the ray created a vacuum beside it.

Still it drove on toward me, and then as I sent my own circle rushing straight back toward it, our two deadly rays crossed and clashed there in mid-air, both of us swerving instantly to avoid the opposing ray. Circling, dipping, striking, we hung there beneath the what transparent roof, high above the great moon city that lay in the dusk far beneath, engaged in what was surely as strange a battle as ever was fought. I knew, though, that that battle could not continue for long, for my opponents were very skillful in handling the great flying-circles, and it was only by superhuman efforts that I had been able to avoid their leaping shafts of green light as long as I had. Those green shafts striking from our circles produced a swift succession of great thundering detonations about us, and I knew that should the sounds be heard in the city far beneath, it would be a matter of moments before other flying-circles would be racing up also. Knowing that, I decided to risk all on a desperate expedient which had occurred to me, and which would give me a chance, at least, of destroying my pursuers.

Driving my circle toward the hovering circle of my enemies, I waited until their green ray had leaped lightning-like toward me, cleaving the air but a few feet above me as I dipped from it, and then as the thunderous detonation of that ray sounded, I collapsed suddenly, went limp there on the surface of my flying-circle, its

control loose in my grasp. It went whirling downward through the dusk without my guiding hand, while I clung to it. I saw the rays of the enemy circle cease as it did so, saw them driving smoothly down after my falling circle, as though to inspect it more closely. Swiftly they slanted down after me, while I clung frantically to my own circle's surface. Then as they swept nearer toward my tumbling craft I grasped its control, righted it with one swift motion, and before the driving circle beside me could swerve away had pressed the raystud and had sent a shaft of the green ray stabbing toward the group of moon-creatures at its center!

As that green ray struck them I heard the rocking detonation of it loud in my ears, and in that moment, while their circle drove beside my own, I saw the creatures upon it suddenly collapsing and staggering and falling, falling to death as their bodies swelled, broke, and exploded before my eyes! The next instant, with no living hand at its controls, their great flying-circle was driving crazily down toward the shrouding dusk beneath in a long slant, disappearing in the dusk in another moment as it plunged to destruction! Then, with my own flying-circle speeding smoothly on through the dusk, I lay for a few moments motionless at its center, filled with the sick horror that had flooded through me as I had seen the turtle-creatures explode beneath my ray, forgetful for the moment of all save the hideous form of death that had overtaken them in the green shaft of light that I had loosed upon them.

When I overcame that horror and came back to a complete realiza-

tion of my position, I found my circle still soaring smoothly onward through the dusk which veiled all things about me. Now I sent the strange great craft slanting downward again, down through the thick twilight until the gleam of the transparent roof had receded again to far above me, until I could make out again the masses of faceted buildings and thronged metal streets of the great moon city beneath. As I drove cautiously down over it, avoiding with utter care the flying-circles, swarming here and there above it, I became convinced that the battle which I had fought high in the dusk above had aroused no attention here in the city below, since no alarm had been given. Flying-circles still swarmed across the city from roof to roof, and in the metal streets the turtle-creatures continued to throng, but there was no evidence that any had heard the detonations of our combat.

Satisfied that this was the case, I gazed about me to ascertain the direction of the great plaza from which I had come. But now I saw that the great buildings and the streets, above which I moved, were so similar in appearance to each other that there was nothing by which I could remember the way I had come. Swift panic shoot through me, as I comprehended suddenly that my circlings and turnings in the battle high in the dusk overhead had hopelessly confused all my direction-sense, and that, without any landmarks to remember in the great moon city beneath me, I had no idea where the great plaza, with our cylinder beneath it, might lie! I was lost—lost there above the great city of the moon creatures!

Chapter VII Through Strange Perils

A cold, uncontrollable terror gripped me as I realized that I had lost all idea of my whereabouts, that I might wander through the dusk over this colossal moon city until some unavoidable accident would inevitable discover me to its hordes beneath. Then, forcing myself to consider my situation calmly, I strove to remember in what direction I had come from the great plaza, but found the effort in vain, my twistings and turnings aloft having hopelessly confused me. To rise higher for a wider survey of the great city was useless, since the higher one went, the more difficult did the dusk made such a survey. I came to the conclusion, finally, that my best hope was to move on over the city in search of Carson and Trent as I had been doing, trusting that my seach might bring me within sight of the great central plaza.

So, sending the great flying-circle down toward the huge, crystal-like metal buildings, I began again to soar smoothly above them at moderate speed, watching intently for some sign of my friends, scanning the crowded streets and the great buildings carefully for some trace of them. On and on, over the weird seemingly-endless city of the moon-creatures I went, but all its vast expanse seemed the same, geometrically patterned rows of giant buildings, their inset circles glowing with soft light; the ways between them crowded with the never-ceasing throngs of the turtle-creatures, and the air above them swarming with great flying-circles like my own, among which I desperately twisted and turned in

the dusk. On I went, and had been engaged in this seemingly fruitless survey for some two hours, had begun to think that after all my quest was useless and that Carson and Trent had been slain in the struggle there in the plaza. But the sight of a gigantic building of the same shape as all the others of this strange city, but immeasurably larger than any I had yet seen, drove all such thoughts from my mind.

A single titanic crystal of metal, with many angles and faceted sides, set with glowing circle and triangular window, it loomed giant-like among the smaller faceted crystals that were the buildings about it, its own vast bulk lifting for fully two thousand feet toward the transparent roof far above. I sensed, immediately, that this was some center of the moon city's activities, the more so because its great flat roof was alive with flying-circles landing and departing. To venture near it, I knew, was to risk instant discovery, so swarming with life was the air above it and the streets about it, yet hope was rising suddenly in me, and I drove the flying-circle down toward the great building's faceted side, partly hidden by that side and by the thick dusk from the masses of flying-circles arriving and departing above. Then, gazing forth with hope-quickenened eyes, I began to move slowly with my great flat craft about the mighty structure's side, gazing tensely toward its triangular windows as I passed around it. And then when I had passed around half the giant building's bulk, I stopped my throbbing craft suddenly short in mid-air, gazing through the dusk toward a window above me, with heart suddenly racing.

I had seen a face there, a half-discerned face that, in the moment I had seen it, had appeared to me white. *human*. For but a moment that face had showed at one of the triangular little windows set in the mighty building's side above me, but that uncertain glimpse through the dusk had given me sudden new hope. Quickly I grasped the control of my flying-circle, began to move up toward that window. The next moment I had swerved outward again from it, for glancing down, I noticed a number of turtle-creatures standing motionless at the mighty building's base among the surging throngs about it. Apparently they were guards, and they were gazing up toward me through the dusk! I dared not loiter longer outside the great building's side lest their suspicions be definitely aroused, and with something like despair I sent my flying-circle driving upward instead.

As I shot upward, though, above the level of the great building's roof, I saw that which suddenly renewed my hope. The masses of departing and arriving circles had ceased for the time being on that roof, and amid the flying-circles resting on it I could see a round opening and a stair leading downward. Gazing across the great roof, hovering in the dusk beside it, I saw then that there were guards upon it, a half-dozen turtle-guards armed with ray-hemispheres, but that they were moving toward a great flying-circle which had landed upon the roof's far side a moment before, one that was loaded with many strange machines. Not only the guards were moving toward it, but up through the opening from the great building's interior were pouring several scores of turtle-creatures

who were heading toward that newly landed circle, preparing apparently to unload from it the mechanisms it carried.

Within a moment all had hurried toward that disk, far across the great roof, and as I peered through the dusk toward it, I saw that the opening leading downward was quite unguarded. A moment I hesitated, then abruptly sent my flying-circle throbbing smoothly downward toward that opening on the roof. Down I slanted, the circle coming smoothly to rest in a moment on the flat roof beside the opening, and then I had sprung from it to the roof, gazing fearfully across it through the thick dusk toward the group of turtle-creatures about the newly-landed circle at the edge, hundreds of feet from me. They had apparently not noticed my landing circle in the deep twilight, and at once I sprang toward the opening leading downward, pistol in hand, and was creeping silently but swiftly down the narrow stair that led into the mighty building's interior.

Down—down—step after step I crept, silently as possible and with pistol ready, down until I saw that the stair ended a dozen feet below me in a wide corridor from which opened many doors. From these doors came sounds of activity, humming of machines and deep tones of turtle-creatures, and I gripped my weapon tightly as I crept toward the nearest of them. In a moment I had reached it, was silently drawing myself to its edge, peering inside. There was a great room inside, duskily illuminated like the broad corridor by a few circles of glowing light. Within it were great looming mechanisms, moving cogs and bars and chains which

were mysteries to me, tended by a score or more of turtle-creatures who appeared to be shaping upon them hemispheres of metal that recalled to me instantly the deadly ray-hemispheres. Only a moment I peered inside, thankful for the deep dusk of the great building's interior, then with beating heart silently pulled myself past the open door, unobserved by the busy monstrous shapes inside, and was moving on down the corridor.

Past other open doors I crept, all opening into great dusky rooms filled with humming machines and with turtle-creatures. In the shadowy corridor I had met none of them, so far, but knew that not for long could my good fortune thus continue, knew that with the return of those who had poured out upon the roof, the corridors would be filled with them. Swiftly and silently I crept on, toward a stair that I could see now leading downward from the corridor a metal stair, down which I crept as I had descended the first, to find myself in a long corridor almost exactly like that which I had just left. From it too opened many doors, but through the deeper shadows of that corridor I crept toward the continuation of the stair, almost without seeing the interior of those busy rooms. It seemed incredible that I had progressed even so far downward without discovery, but I knew that the level of that window, in which I had seen the face that had brought me down into the great building on this mad quest, lay considerably lower.

Down another stair I crept, and another, and another—shrinking back as I came down the third to see a half-dozen turtle-creatures approaching me along the corridor beneath, bearing some machine

with them. But though I crouched on the stair with pistol gripped tightly, they did not come that way. Instead they passed along the dusky corridor beneath, and as their footsteps on the smooth metal receded, I was down into the hall, moving through its dusk toward the next stair to take me to the level below, which I estimated to be the level I sought. Down that last stair I moved, but when I reached its bottom I stopped abruptly short. For though it ended in a corridor like those above me, that corridor had a metal wall on its right side only. On its left side was sheer space, and as I crept to that side and gazed downward, I saw that there dropped downward the great emptiness of a titanic room, a vast, circular hall that was hundreds of feet in diameter and in height, and near whose curving ceiling I was crouching, only a low rail separating the floor of the corridor in which I crouched from the great room's emptiness.

A great, soft-lit hall it was that must have occupied a half of the giant building's interior, and peering down, enthralled, I saw that upon its circular floor were ranged thousands of low metal seats, empty now, their emptiness making the room seem greater. At their center, though, was a round clear space and there, about a small triangular metal table, sat three turtle-creatures, three monsters who seemed silently examining a litter of thin metal sheets and a mass of small models or mechanisms before them. Quite silent they sat, at that vast fane's center, yet seemed strangely to dominate it, fill it. For a while I gazed at them, then, recalled to realization of my own

purpose and peril by some sound above, turned swiftly. I was on the level I had sought, I knew, and I knew that the room whose window I had noted lay somewhere to the right from me. So, hastening along the dusky corridor, the gigantic soft-lit hall's depths still to my left, I felt my heart beat with hope again, as I saw before me another branching corridor turning to the right from the one I followed. In a moment I was at it, hurrying around the corner into it. And as I turned that corner, flinging myself recklessly forward by then, I collided full with a great turtle-creature who had been coming round it toward me!

The great monster and I had crashed together at the same moment that I caught sight of him, and then before I could raise the pistol in my hand he had grasped me, knocking it from my grip, and we were straining there together in a death-grip! Even as the great taloned paws had closed about me, as I had been pulled in toward the hideous, shell-cased body, I realized in a flash that a single cry from the creature would sound the alarm, and so had grasped his snake-like neck just beneath the reptilian head, in a throttling grip into which I put all my power. Thus for a moment that seemed endless to me, we stood there together, silent, almost motionless, locked in a death-grip in the corridor's shadows, the great taloned limbs crushing about my body with inconceivable force, even as my own hands closed tighter about the snaky throat. I felt my strength going as the relentless crushing grip about me held, but heard too strangled cries from the creature whose throat I held, and then felt

his grip on me relax as he struck out with all his force to free himself from me and from the grip that was throttling him. Whirling me about with terrific power, he strove to free himself, yet his struggles were weakening and dwindling, as I held fiercely on. Another moment and with a sudden collapsing movement, the creature had slumped downward. A moment I retained my grip, then satisfied that the monster was dead, I straightened, looking wildly about me.

Nothing disturbed the dusk of the corridors about me, no alarm having sounded, but now the sounds overhead were nearing me and I knew that the creatures on the roof were pouring back down into the building. Swiftly I glanced about, panting still, then moved forward down the corridor into which I had been turning, toward the right. The body of my late antagonist I left where it had fallen, perforce, though I would have wished to conceal it lest the first passer in the corridor discover it and comprehend what had happened. Down this new hall I went, and found that though doors opened from it, the rooms held no humming machines or turtle-creatures like the others I had seen; these seemed dark and empty. A few moments more and the end of the corridor loomed before me, a blank wall. But to one side of the hall near its end was the last of the open doors, and one that I judged must lead into the room whose window I had seen from outside.

Cautiously, though, I crept toward that open door, disregarding in my excitement the nearing sounds of the coming of the turtle-creatures from above, creeping toward that door until I was at its edge, peering

with beating heart inside. So dark was the room's interior into which I looked, that for the moment I could make out only the triangular section of dusky light that was its window. I took a step forward toward the open door, another—and then sprawled on the corridor's floor as though knocked back by some giant invisible hand from within! Even in the instant that I fell, I knew what had happened, knew that across that apparently open door there stretched a sheet of invisible force through which no matter could penetrate. But even as I fell, then even as I rose swiftly to my feet, I noted a stir of movement inside the room's dark interior, saw dark figures within rushing toward the invisible door, toward me, the dim light of the corridor falling upon them through that door as they did so, erect, dark figures at sight of which I gasped aloud.

"Carson—Trent—Howland!" I exclaimed, and at the same moment heard a cry from the foremost of them.

"Behind you—quick!" cried Carson.

I whirled around, and behind me stood three of the great moon-creatures! Even as I whirled and saw them I knew that they had found the body of their slain fellow in the corridor, had searched after me to overtake me at the very moment that I had found my friends. Even as I turned toward them their great arms had swung up above me, the ray-hemispheres in their grasp. I flung up my arms toward them in that flashing moment, but was too late to ward off their blows, for the next instant one of the metal weapons had descended upon my head with

crushing force. I felt myself swaying, stumbling and falling before them, and then they and all else about me vanished from my mind as darkness overwhelmed me.

Chapter VIII Howland's Story

Consciousness came back to me through fiery mists of pain, consciousness in which my first sensation was of a throbbing ache that beat through my brain like the dull beat of a great machine. Moving about somewhat exploringly, I became aware that I was lying on a smooth, hard floor, and that there was a similar smooth wall beside me. Then with an effort, I opened my eyes. I was lying in a small, almost dark room, its metal ceiling a half-score feet above me. A triangular window opened upon a great soft-lit, dusky space outside. Then, as I stirred, I heard movements on the room's other side and in a moment there had come toward me and were bending over me three figures at sight of which I caught my breath, remembrance of all that had happened rushing over me.

"Carson—Trent—Howland!" I exclaimed again. "I've found you then, Carson—and you've found Howland!"

Carson nodded silently, and then Howland, who was bending down with keen, eager face to help me to a sitting position, spoke.

"Carson and Trent and you have found me," he said, "have come from earth to moon to find me—but only to be imprisoned with me!"

I turned to Carson. "Then you and Trent were captured in that fight on the plaza—brought here and imprisoned?" I asked. He nod-

ded.

"Captured there and brought here and imprisoned with Howland, only a few hours ago," he said. "But you, Foster?"

Swiftly I explained to him how I had managed to escape the moon-creatures, when the alarm had been given, by concealing myself in the great chamber of the cylinder, beneath the plaza; of how I had slain the guard in my battle over the shaft and had stolen a flying-circle, to soar up over the moon—city in search of my friends; of how on that flying circle I had ventured across the great city, had fought my wild battle with the flying-circle of the turtle-creatures who had discovered me, high in the dusk above the city, and of how, after finding myself lost over the city, I had stumbled upon the gigantic building in a window of which I had glimpsed the face that had made me dare all risks to venture down onto that building in search of my friends, only to be discovered, stricken senseless, and imprisoned with them. When I had finished, they sat for a time in silence, and I saw that Howland's face was working.

"I did not dream that Carson and Trent and you might ever follow me here, through all these perils," he said, slowly. "I never dreamed that any there might be who would venture from earth to moon after the moon-creatures who captured me."

"It was Carson's plan," I told him. "It was he who saw you captured, there in the camp at Yucatan, and it was he who suggested that we follow—out to the moon—to rescue you and to take back to earth proof of the doom that Carson thought hangs above

it."

"You thought that, Carson?" asked Howland, turning quickly toward him, and when the other had nodded, his eyes grew brooding, strange. "Then you have divined the truth. You know now that within hours these countless millions of moon-creatures, who fill the mighty city about us, will be starting to leave that city, will be starting to leave the moon, forever—will be launching their first hordes, their first terrific attack, against the earth to seize it for themselves, and to wipe from existence for all time all the races of man!"

He was silent again for a moment, gazing out through the little window and across the great, unearthly city of faceted metal buildings, of swarming flying-circles and turtle-creatures, that lay in the dusk about us, and then he turned again toward us.

"Carson—Trent—to whom I've had time to tell nothing in the hour or so you've been here, hearing your own tale," he began, "and you, Foster—you three know how I was captured by the moon raiders there in our camp at Yucatan. Carson has told you how Willings and the rest were slain, how I was captured by the turtle-creatures and taken down into their cylinder on the next night, how that cylinder was driven out through the gulf when the signal-note sounded, out to the moon itself on the great beam, out at awful speed and through the moon's shaft, like your own cylinder, to come to rest there beneath the plaza's disk. Then the cylinder's bottom was opening, and the packed flying-circles inside it were emerging, with myself on one of them still, moving up through the great opening and above the

great lunar city itself.

"Over that colossal city, lying in dusk beneath the lunar night, our flying-circles drove, a city that I recognized was built upon the far side of the moon from earth, and which amazed me utterly. Why had these turtle-races built their tremendous, air-tight city on the moon's far side alone, where it could never be seen from earth? Was it for that reason that they had built it there? That thought startled me, but before I could consider it farther, my captors had sped across the great faceted buildings of the city and had reached their goal, a single greater building, hugest of all I had seen, this building in which we now are, and which is the great center of government for the moon-race. Down toward its roof our flying-circles slanted, coming to rest on that roof, and then after being challenged by guards upon the roof, we were passing down into this great building's interior.

"Down through corridors and stairs and halls we went until we had reached the colossal hall that occupies most of this great structure, and that was filled then with a full three thousand of turtle-creatures ranged in regular rows of seats about it. At its center sat three others, about a triangular table, and I saw instantly that this was the great council that ruled the moon, and that the central three were, without doubt, its heads! Toward those three I was immediately led by my captors, who then made swift explanations, in their deep tones, to the three and to the thousands about them. Then, the center of interest for all the grotesque turtle-creatures massed about me, I stood there, wondering,



awe-stricken, until the bass voices of the three leaders recalled me to myself.

"Just as I had done the first time, I replied in English, convincing them that my speech was wholly different from their own. They pondered a moment, then gave brief orders. At once I was hurried out of the great hall, back up into the building to this cell, one whose open door was closed upon me by a sheet of force projected across it, a sheet of force quite transparent to the vibrations of light and heat and so forth, but utterly impervious to matter-vibrations, thus forming a door more secure than steel. The window was quite open, and is still, but escape by it is impossible, because it is set in the sheer walls of the great building and lies hundreds of feet from either ground or roof. Then I was given food, a semi-liquid food that tasted like some chemical to me, and that was obviously artificially made by the synthesis of organic compounds directly from their original elements.

"Left alone for a time, I endeavored in vain to comprehend the strange situation in which I found myself; the purpose of these monsters in raiding earth; the presence of the great shaft and disk there on earth; the earth-like gravitation here on the moon; the

gigantic preparations and activity going on all about me. My thoughts were soon interrupted by the arrival of three turtle-creatures who, I found, had been sent by the great council to instruct me in their language. Pointing to objects outside, they called them by name in their strange tongue, I repeating after them as best my human voice could. In this way I gradually acquired a few words of their strange language, and soon picked up the rudiments of that language, could express myself haltingly to them, and could understand a great deal of their conversation.

"Day after day, hour after hour, they kept at me, until I could exchange ideas with my teachers with some fair success. They informed me, partly by gestures, that they had been ordered to instruct me in the moon-creatures' tongue so that I might be questioned by the great council which I had already seen. That council was called the Council of Three Thousand, while the three leaders of it which I had seen were called the Council of Three. The great council represented the whole moon-creature race, as I learned, with the Council of Three acting as executives. Learning this, I strove to learn more, questioned my instructors as to the reason for my capture, for the moon-creatures' raid to earth. And, because they had been given no orders otherwise, they told me readily enough. And in that telling, in the eon-old history of these moon-creatures which they laid bare to me at last, I saw at last the true colossal solution of the great enigmas that had puzzled me, and saw too what gigantic doom it was that was hanging above our unsuspecting earth! Learned what I had never dreamed

before, learned that these moon-creatures had not always dwelt here upon the moon but that they had come here eons in the past, *had come here from our own earth!*

"Yes, from our own earth! For eons ago, earth was far different from the earth we know. It was a young planet, a planet covered almost completely by its great seas that now have receded, seas which covered almost all its face, leaving but small sections of land here and there. And in those seas, as we know, began earth's life. Starting from the first crude jelly-like forms at those seas' bottom, climbing up the great ladder of evolution through invertebrate and vertebrate forms, that life developed—developed into the prehistoric armored fishes, into the great crustaceans, into the great shellcoated sea-monsters, at whose size and ferocity we can but guess. Life swarming and abundant, life developing through thousands of different forms, but all life in or about the sea! For in our earth's youth, ages were to pass before the first land-forms were to appear, before the first land-creatures that were to develop into the mammals and into man had come to exist.

"Out of that great swarm of different forms of life, sea-life and amphibious life, there developed finally a single race or species of more intelligence than any of the rest, which rose slowly to dominance above the rest. A race of amphibious beings it was, armored with thick shell and with great taloned limbs, with snakelike neck and reptilian head, a race seeming like great turtle-creatures to us, yet which were in reality far, far different from any crustacean forms, or any other forms of which we have knowledge. A race of beings

out of the world's dim, forgotten youth, all in memory of which has passed on earth. Yet there, in the long-dead past, these turtle-creatures had risen to power above all the other reptilian and amphibious and sea forms about them, by reason their great intelligence, their reasoning power. They had climbed upward to the supreme position in their world just as man, ages later, was to climb, and so at last developed a civilization equalling and surpassing the later one of man.

"Cities they built across the earth's surface, strange amphibious cities built along the sea's shores, inhabited by that strange, amphibious turtle-people. As the seas on earth slowly receded, though, they lost their amphibious nature, became wholly land-creatures, though unchanged in appearance. And in their great cities their power and their knowledge, their science, rose ever to greater levels. They discovered the forces of the world about them, of electricity and radium and heat, built cities ever more gigantic, came at last to have all the earth beneath their sway. From icy pole to icy pole the turtle-creatures reigned supreme. They even penetrated into the depths of space, with the great telescopes that they had constructed. And, peering out across those depths, they made a great discovery; they discovered that earth's moon was inhabited as well as earth itself!

"Earth's moon was inhabited, and had been inhabited for eons before earth itself. This, of course, is not surprising, when we consider the origin of earth and moon. We know, thanks to Chamberlin and Moulton, who first promulgated the theory, that in the remote past, the sun was but a single great fiery ball,

spinning in space without accompanying planets; that some other sun, some other star, passing close to it through space, set up in our sun great tidal waves of its fiery self, great waves that instead of receding broke loose and burst out from the sun, forming into smaller fiery masses that fell into orbits about it, moving around it in regular order and forming the eight major worlds of our solar system. Some of these worlds, in turn, due to unstable conditions, threw off in turn smaller fiery masses which were to become their moons. The fiery mass that was earth thus threw off a smaller single mass that was to be our moon. This the turtle-creatures knew to be the history of the solar system's formation.

"They knew, too, what is evident to all, that the smaller of such fiery masses cooled and solidified far more quickly than did the larger. For that reason, the smaller flaming mass that was the moon had solidified and cooled long before the earth. Its molten mass had cooled into rock, its elements had condensed into great seas that covered the greater part of its surface, and following the usual evolution of worlds, those seas, with their erosion and the added erosion of wind and weather, had worn away the barren rock partially into small particles, into soil, so that finally the moon's surface was much like earth's is now, a surface mostly covered with its great oceans, but with continents also, with great mountain ranges and deep valleys.

"All of this the turtle-creatures, reigning on earth, had guessed, but now as they peered out toward the moon they found that it was inhabited by a strange race of great

black worm-beings, like huge worms in shape, but of intelligence and knowledge of science greater even than their own. By means of great light-signals they were able to communicate across the gulf with these beings, and from them learned how they had arisen on the moon long before. For when the moon's surface had cooled, had formed great continents and seas, life had arisen upon it also, life that had changed through a myriad alien forms of its own, there on the moon, while earth was still a fiery mass upon which nothing might live! And on the moon too, long ago, one form had become dominant above all others, a race of great black worm-folk whose strange shapes and swift movements were the result in some way of the moon's gravitational power, so much less than that of earth. These worm-folk had risen to supremacy on the moon, by their own science and power, while earth was still but a molten ball, and as the ages had moved on, their science and their power had steadily increased.

"But at last there loomed before them a situation which required all that science and power to overcome. The moon had cooled quickly, had solidified quickly, in accordance with the law of the evolution of worlds, but in continued obedience to that law it was still cooling, was growing colder and colder. Soon, the worm-folk knew, its fiery heart would have become completely cold, and then life would become impossible upon the moon, since as it cooled, its air was deserting it. Its great seas had dwindled and vanished long before, though this meant nothing to the worm-folk, who by their science, could produce artificial water sup-

plies. But if their world grew completely cold, if its atmosphere left it as they knew it would soon do, nothing could prevent their extinction. So all the great scientists of the worm-folk met to find some means of staving off the doom that hung over them.

"It was impossible for the worm-folk to migrate to earth, since earth had just begun to solidify, to cool, and was still a great ball of half-liquid lava. It was true also of the other planets, so they knew they must meet their problem on the moon. Thereupon, they devised a tremendous plan by which they might save themselves. And this plan was none other than to enclose all the moon's surface, all its sphere, with a great transparent and air-tight covering, or roof. Beneath this covering they could live comfortably and safely enough, for it would not be difficult to construct great plants to supply their air-tight city with an artificial atmosphere. It meant a titanic labor, even for the powerful worm-folk, to adopt this mighty proposal, but it meant too that they could thenceforward live upon their world unthreatened by any danger. They set to work upon it at once.

"It had taken them an age to complete that gigantic task, an age throughout the years which all the millions of the great worm-folk had labored upon it. At last it was completed. They had erected, several miles above the moon's surface, a mighty transparent roof, which was of a transparent alloy of metals, stronger than any we know, and which admitted unchecked the sun's life-giving light and heat but which was completely air-tight. Then they had constructed their giant atmosphere plants,

plants which functioned automatically, replenishing and purifying the atmosphere of the great air-tight space, and which made the air question of no further danger to them. Their great transparent roof was so supported by great pillars placed at a few strategic places that there was no danger of it ever falling or breaking. Outside the last remnants of the moon's natural atmosphere had left it, leaving but a perfect vacuum outside the air-tight roof, but inside it the worm-folk had in plenty the air which they required, like most creatures, for life, and so could live on unharmed in their air-tight city that covered all the moon.

"For age upon age they had lived on thus, in that strange and mighty hermetically-sealed city, while the earth was cooling, and forming its continents and seas as the moon had done once. And swiftly on that earth, as I have said, life had arisen in a myriad swarming forms, life that had produced at last the great race of turtle-creatures who had become dominant and who ruled by that time over all the earth. And, as I have said, these turtle-creatures, with their growing science, had peered out and discovered the strange worm-folk whose mighty city lay beneath the moon's great gleaming roof. They had, by means of their light-signals, managed to communicate with them, and let them know that there was now an intelligent race on earth, also.

"The worm-folk, in their great moon city, were surprised to learn that such a race of intelligent beings had arisen on earth, for long before they had lost interest in earth and its savage creatures. Now, though, welcoming the event as a break in the monotony of their lives in

their air-tight world, they communicated at length with the turtle-creatures on earth, and finally began to devise a plan by which members of the two races might visit one another, by which they might cross the gulf that lay between moon and earth. And finally the worm-folk, whose science was greater far than that of the turtle-creatures, devised a plan by which that gulf could be crossed, almost instantly and without danger. Communicating their plan and its details to the turtle-creatures of earth, both races began to construct the apparatus that would enable them to cross the void.

"That apparatus, which the worm-folk had devised, was a great disk which shot forth a beam of terrific power, a beam whose pressure and power were due to the phenomenon of light-pressure. You know that light exerts a considerable pressure upon objects which it strikes. You have seen the various methods by which physicists have measured this pressure, the various small mechanisms such as radiometers and the like which they have claimed to be driven by that pressure. Well, the disks which the worm-folk had devised shot forth a great light beam generated by mechanisms which concentrated the pressures of a vast amount of light into one single, terrific beam. The worm-folk constructed a disk like that in a deep, vertical shaft on the moon's surface, while the turtle-creatures, following their communicated instructions, constructed a similar disk in a similar shaft on earth. Then came the first trip across the space, made by a score of the worm-folk.

"These entered a cylinder specially made to insulate them

against the cold of space, an hermetically tight cylinder which they placed upon the great disk in the shaft on the moon. This shaft was in the side of the moon which is always turned toward earth. They waited then, all but one in the cylinder. That one remained at the switch outside. Finally there came a great bell-signal, one which told them automatically that the two shafts, the one on the moon and the one on earth, were facing each other exactly at that moment, pointing straight toward each other like two great cannon. As that signal sounded, the one at the switch threw that switch and leaped inside the cylinder, closing it. The next instant the great beam had driven up from the disk, had driven them up and outward, through a special valve-opening they had placed in their great transparent roof, out across the mighty void between moon and earth. And that great beam, driving the cylinder before it by its own light-pressure, drove it on through space at almost the speed of light itself, just as an empty can, driven forward by the stream of water from a hose, will drive on at almost as great a speed as the stream about it rushes.

Propelled through the gulf by the great beam at that awful velocity, it took one instant to flash the great cylinder from moon to earth.

"From moon to earth they flashed, and straight into the great shaft in the earth's surface, down into that shaft. As they went down, the approach of their cylinder automatically turned on an opposing beam from the disk beneath them, which brought them swiftly and smoothly to a stop.

Then the worm-folk emerged from their cylinder, the first travelers across the void, the first moon-beings to venture to earth, and they were greeted by the turtle-creatures who had gathered about them in great numbers.

The gravitation power of earth, of course, was far greater than the gravitation power on the moon, but this did not trouble the worm-folks. They had devised something which would easily overcome that difficulty. As they came out from the cylinder, they boarded a small craft they had brought with them for the purpose, in which was embodied a mechanism that could increase or decrease the gravitational force about it at will, by either intensifying or weakening (whichever the circumstances demanded) with its own vibrations the vibrations of gravitational force. The worm-folk, therefore, could move freely about the earth in their craft, and could inspect the cities of the turtle-creatures.

"After that first visit, many such visits were made, worm-folk flashing down to the earth on the beam in their cylinders, while turtle-creatures flashed up to the moon in their cylinders on the beam from their shaft, in the same way. And the great worm-folk, whose science was so much greater than that of the turtle-creatures on earth, taught them, instructed them, generously and unselfishly, gave to them out of their stores of science and knowledge, without suspicion or reserve. And ever the turtle-creatures learned from these mighty beings whose civilization had been great on the moon while earth was still a fiery mass, learned and learned. Turtle-creatures flashed to the moon in numbers to inspect the great won-

ders of the air-tight city that covered all the moon, to learn from the great worm-scientists the secrets which they had discovered, the control of nature's forces which they had attained to. While down to earth from the moon came numbers of the worm-folk to help and to instruct the rising races of the turtle-creatures. An intercourse it was between earth and moon, between two mighty and intelligent races of unlike beings, taking place eons, ages, before man or the forerunners of man had ever arisen on earth!"

Chapter IX

A Saga of Worlds

"So the two great races had dwelt together, one on the moon and one on the earth, the older race of the worm-folk on the older world of the moon, and the younger turtle-creatures on the earth. Following out the things they had learned from their instructors on the moon, the turtle-creatures reared greater and greater cities, came to greater and greater power. It must have seemed to them, indeed, that they were lords of earth beyond any shadow of question, that none upon earth dared doubt their will. But fate, if there is a fate that smiles grimly above our tiny worlds, was even then preparing a great catastrophe that was to rush upon them, a giant blind and brutal force of nature against which all their science and power could not stand. And that cataclysmic force that crept at last upon them with the thunder of doom was—the glacier.

"The glacier, mightiest of all forces that move upon this earth, shaping earth's very face with its slow, resistless movement! A gigantic tide of ice, sweeping southward and northward from the poles,

across the face of earth. Sweeping southward and northward at eon-long intervals as earth's poles incline toward the sun, sending the giant polar ice-masses creeping across earth's face toward the equator. Giant floods of irresistible ice, marching inexorably out across earth from the polar regions and only receding from earth's face when earth's poles tilt away from the sun once more. The glacier, that carves the very mountains of earth from out its surface, with grinding, inconceivable power—and that was the colossal icy doom that was creeping forth now upon the world of the turtle-creatures!

"Startled as they were by the first alarm, they rallied at once to repel this cataclysmic doom that was marching southward and northward upon them. Their first move was to devise great heat-producing mechanisms, mechanisms that shot forth giant rays of intense heat, and with which they sought to melt the oncoming glacial floods. But though these mighty rays instantly melted the ice masses that they touched, those melted masses froze again when the heat rays were turned off. Also the great melting ice-masses soon flooded them so that the operation of the mighty ray-mechanisms was impossible, and they saw now that such rays could never hold back the glacial masses, even though they were kept constantly trained upon them, since resulting floods would sweep away the mechanisms, and then with their passing would freeze again to ice. Discarding this method, therefore, the turtle-creatures sought for others. They could not ask the worm-folk on the moon for aid in this, their great extremity, since they had become with passing

ages proud of their own science and power, had rejected those who had been their teachers, so that the once-great intercourse between moon and earth had almost entirely ceased. They must fight their great battle alone, and they fought desperately.

"Their next move was the construction of a mighty moat or ditch across the glaciers' path, one that was miles wide and many miles deep, and which they hoped might stop the oncoming icy floods. Using great vibrations which broke down matter by destroying the chemical affinity between its atoms, separating those atoms from each other, they blasted, completely around the north and south polar regions, a giant moat that was a score of miles in depth and of equal width. The great ice-masses rolled on toward those giant moats, and into them, pouring into their great depths, so that for the time it seemed that their plan had been successful and that the march of the great glaciers had been halted. But still, steadily, slowly, remorselessly, those glacial floods were grinding on, on until soon they had filled even the great moats before them, were pouring on unchecked toward the equator.

"Northward and southward they swept, unchecked, and then the turtle-creatures saw at last that all their efforts were in vain, that there was no way by which these resistless icy floods could be halted in their titanic march over earth's surface. Already their northernmost and southernmost cities were being overwhelmed by the giant ice-masses, those great ice floods surging across their cities, grinding into fragments their soaring structures, the great, many-sided and faceted buildings that made up those

cities. From north and southward the turtle-creatures were fleeing from those cities, and it had now become evident that the great glaciers could not be stayed, and that the turtle-races could only stave off annihilation by flight from earth, across which the great ice-floods were grinding! And there was but one place to which all the turtle-hordes could quickly flee, and that was to the earth's moon!

"Yet how, the turtle-creatures asked themselves, could they hope to find a refuge on the moon? For it was covered completely with the great city of the worm-folk, whose transparent and air-tight roof covered all the moon's surface. So great in number were the worm-folk that there could never be room upon the comparatively small moon for them and the turtle-creatures also. In hundreds of millions, in billions, swarmed the worm-folk in their strange vast covered city, and for the equally great hordes of the turtle-creatures to hope to share their moon-world with them was out of the question. There was but one chance left for them, the turtle-creatures decided, and that was to destroy utterly all the great worm-folk, and seize the moon-world for themselves.

"But what hope had they of doing this? They asked that question of each other. What hope had they of conquering and destroying the great worm-folk, who were farther advanced in science and power than they were, and who were equal in number to themselves? They could send invading parties of turtle-men out to the moon on the great beam, but such invaders would never return; they would be annihilated instantly by the terrific weapons, which they knew

that the worm-folk possessed. It never occurred to any of the turtle-creatures that it was blackest treachery they were proposing in this contemplated annihilation of the friendly worm-folk, who had helped and instructed them through their own scientific knowledge. To the turtle-creatures' cold, unsympathetic minds, the right and wrong of the thing did not exist. Their problem was to find some way in which they might quickly annihilate the whole race of the worm-folk, and seize their world, and that problem seemed insoluble to them.

"But at last, spurred on by the cruel menace of the grinding glaciers that were marching steadily over earth's surface, the turtle-creatures found an answer to that problem. They found a method by which all the mighty races of the worm-folk on the moon could be annihilated, in a single moment. They found a way by which, without the slightest danger to themselves, they could instantly depopulate the whole moon-world. And that method, the weapon which they could use for it, was the great beam of light-pressure that shot the cylinders back and forth to the moon, the great beam which the worm-folk themselves had devised for them!

"The center of the turtle-creatures' great plan was the fact that the air-tight city of the worm-folk, its mighty transparent roof, extended over all the moon's surface. As I have said, the worm-folk, being air-breathing beings like the turtle-creatures, like ourselves, like almost every form of life, had made that great roof air-tight, so that their artificial atmosphere inside it could not escape to the vacuum

of outer space. For around and outside that mighty shield there lay only the utter vacuum and cold of the outer void, and well they knew that if any openings were in their great roof, all their atmosphere would instantly rush out through those openings, into the great void outside, just as a container of air, if opened within a vacuum, would instantly lose its air into that vacuum. An opening in the great roof, indeed, would mean that the moon-world beneath that roof would be stripped in an instant of all its air, and that in that same instant the whole race of the worm-folk would be demolished by the vanishing of the air that meant life. For this reason they had been extremely careful in building their great roof to make it quite hermetically sealed and air-tight, since an opening in it meant instant death to them.

"The turtle-creatures knew this well, for many of them had visited the moon-world when intercourse between moon and earth, between the worm-folk and turtle-creatures, had been frequent. Now they remembered it; they made it the basis for their gigantic plan. That plan, which was now well formulated, was merely to suddenly puncture in many places the great roof of the worm-folk! The whole artificial atmosphere of their moon-world would instantly rush forth into space, and in that instant the worm-folk would be annihilated, and the turtle-creatures could then proceed up to the moon-world in all their hordes, could repair the punctured roof and take possession of the moon, and live upon it in safety while the great glacial tides rolled across their own world of earth!

"Such was the plan of the turtle-creatures, and they only needed a weapon with which to put it into effect, to puncture the great roof of the moon-world. And, in the great light-pressure beam that had driven their cylinders back and forth, they found such a weapon. That great beam exerted colossal pressure, pushed forward with terrific force, due to the vast amount of light whose pressure was concentrated within its ray. The beam's pressure they had used to drive their cylinders back and forth from earth to moon, but now they planned to use it for their great plan, to use it to puncture the moon-world's mighty roof. For they knew that the great beam's awful pressure and force would, if turned upon that roof, drive through it as a stream of water from a powerful hose would drive through paper.

"Thus did the turtle-creatures plan to annihilate at one stroke the worm-folk in all their millions, and now at once they began to put their plan into effect. Concealing completely their preparations and intentions from the worm-folk on the moon, with whom their intercourse was now very limited, they prepared hundreds of great disks capable of shooting forth the mighty light-pressure beams, placing them in great batteries over one side of earth, aiming them all toward the moon. Swiftly they completed and placed these masses of mighty disks, while ever southward and northward toward them the menacing glaciers came over the land. At last all the disks were ready, and they waited only until a few nights had passed, until the moon was full, that they might stab their hundreds of great

beams upward with greater accuracy. They knew that even a single great puncture in the moon-world's roof would slay instantly all its inhabitants, but they desired to take no chances, and so had prepared the hundreds of disks that they might puncture that roof simultaneously in hundreds of places.

"The few nights of waiting passed soon enough. At last the full moon rose and the turtle-creatures knew that their moment had come. A moment it must have been in which all the universe held its breath, a moment in which the one great race on earth, prepared to loose annihilation upon the other great friendly and unsuspecting race on the moon. Upward toward the zenith rose the full moon, the great gleaming roof over it gleaming now in splendor for the last time, while the turtle-creatures, in grim masses, stood waiting about their great batteries of disks on earth. Stood waiting until the moon was almost directly overhead. Then across the whole side of earth flashed a signal, and in the next moment the hundreds of waiting disks had loosed their brilliant beams, had sent those awful beams of force driving straight toward the moon and the great gleaming roof that covered it!

"The turtle-creatures, watching from earth with their great telescopes, saw those beams strike the moon's face in hundreds of different places across its circle, saw them drive in through the great air-tight roof and into the moon's surface with terrific power. And as they did so, as they shattered the mighty roof before them, they perceived with their instruments that out from beneath the shattered roof there rushed through the great

openings within an instant all the moon-world's artificial atmosphere shown by clouds of vapor, knew that in that instant all life upon the moon had perished! Knew that their giant beams had indeed punctured and broken the air-tight roof of the moon in hundreds of places, and that all the worm-folk races had gone to instant death, when their atmosphere rushed out into the void! The turtle-creatures had with their one mighty stroke annihilated the life of a world!

"The giant beams that they had shot forth in hundreds had indeed crashed through the great transparent roof, but so terrific in power were they that they had driven onward with unchecked force, had driven with all their awful force into the face of the moon itself. And blasting into the moon's surface with all the terrible power that was theirs, they had instantly gouged great circular holes or craters out of the moon's surface in hundreds of places, just as a stream of water shot forth at great force against a level surface of earth will gouge in that surface a great hole or crater.

"It was thus that the hundreds of great craters that pit the face of the moon, that looks towards the earth, came into being, craters that have always puzzled the science of us humans. You know that it has been suggested that great meteorites striking the moon caused those craters, but that was impossible, for if those bodies had struck the moon when it was solid, the meteorites themselves, though half-buried perhaps, would still be visible at the center of the great craters, and no such meteorites can be seen. If, on the other hand, they struck the moon while it was

still semi-liquid at the surface, the craters they made would have closed up, flowed together smoothly again. It was not volcanic activity or meteorites that had formed those great craters, but the hundreds of giant beams from earth, gouging out those craters with inconceivable force, but leaving no trace of themselves.

"The turtle-creatures, however, were triumphant over the complete success of their mighty plan, and at once began to prepare to migrate in all their hordes to the moon, for it would not be long before the great glacial tides closed ever in upon them. Their first move was to send up a party of turtle-creatures to the moon in cylinders, driving them up with the beam here on earth, and equipping their cylinders with special apparatus to allow them to land safely on the moon, since the other transportation disk on the moon had of course been destroyed by the cataclysmic power of the hundreds of beams that had struck the earthward side of the moon. These first turtle-creatures reached the moon's earthward side safely, and found it a scene of terrific death. Beneath the punctured and broken roof, amid the giant craters that had been gouged from the earthward surface, lay the millions of the worm-folk, slain instantly when their atmosphere had rushed forth into the void through the openings in their great roof. The exploring turtle-creatures, protected from the vacuum about them by special air-tight craft, moved around to the moon's other side and found the city there filled with the worm-folk dead, too. The great roof was intact on that other side, and there were no giant craters, since it was

only toward that side of the moon visible from earth that the great beams had stabbed.

"The turtle-creatures on earth, after hearing the signalled news from the party they had sent to the moon, began preparations for the great migration of all their hordes, but before doing so they reached a momentous decision, namely, that they would settle only upon the other side of the moon, and not upon its earthward side at all, because, they reasoned, we of earth have slain all on the moon by stabbing with our beams at its earthward side and puncturing the great roof there. If we settle over all the moon, they said, rebuild that great roof on the moon's earthward side, we will be laying ourselves open to the same terrible fate. For if any other race of intelligent creatures ever rose on earth in the future, they could slay all the turtle-creatures on the moon by the same method that we used to eliminate the worm-folk. But if the turtle-creatures settled only upon the moon's other side, which was turned always away from the earth, it would be impossible for any on earth to reach them or puncture their roof with rays, or even to know of their presence.

"For these reasons, therefore, the turtle-creatures decided to settle upon the moon's other side only, and they made that decision the more willingly since the moon's earthward side was torn now with gigantic craters that their beams had caused. Sending a larger party of thousands up to the moon, then, these thousands prepared for their coming. They first closed in the great transparent roof, which still stretched unbroken over all the moon's other side, building

transparent walls from it down to the moon's surface so that the whole other side was completely enclosed, the earthward side broken and shattered and neglected by them. It was not exactly half the moon's surface they enclosed in that other side, since a little more than half can be seen from earth. It was just a little less than half, the limiting walls of their great roof being placed on either side just far enough around the moon's other side so that they could not be visible at all from our earth.

"This done, the turtle-creatures working there put into operation the great atmosphere-plants, which again turned forth their artificial atmosphere, serving now but half the moon, yet maintaining within the transparent and air-tight roof of that half a breathable and perfect atmosphere. The turtle-creatures had by then destroyed completely the strange subterranean cities of the worm-folk and their dead millions, themselves constructing in place of them giant crystal-like buildings of metal, angled and faceted and strange, like those of the turtle-creatures on earth. They then set themselves to overcome the last obstacle that remained to prevent the turtle-hordes from moving to the moon, that obstacle being the difference in gravitational power between moon and earth.

"For the gravitational power of the moon was, as I have said, one-sixth that of earth, and the turtle-creatures, accustomed to the greater gravity of earth, could not live long on the moon, the weaker gravity there affecting their internal structure fatally. The visitors who had gone from earth to moon formerly, though, and those of the worm-folk who had come from moon to

earth, had overcome this change of gravitational power in the way that I have already described, by using craft in which were mechanisms that altered the gravitational power about them at will; increasing that power by generating a vibration which was tuned to increase the intensity of the vibrations of gravitational force; and decreasing that power by generating a vibration tuned to dampen or decrease the vibrations of gravitational force.

"It was by means of these generating mechanisms that the turtle-creatures had visited the moon in the past; had sent their thousands of workers there now, increasing the moon's gravitational power by means of these mechanisms until it was, in their craft, the same as on earth. Now they began to build similar generators, but of gigantic power and size, mighty generators that would be able to change the gravitational power on the moon's whole other side, increasing that power there until it was the same as on earth! They built these great generators, then buried here and there beneath the surface on the moon's other side, generators that functioned automatically and unceasingly and that made the moon's other side the same as earth, as far as gravity was concerned. The turtle-creatures could walk about that surface at will, unhampered, and without ill effects; they could live there as they did on earth.

"All was ready; the great air-tight city that covered almost all the moon's other side, the artificial atmosphere that was maintained within it, the change of gravity that had been made. All was ready to come to the final step of their gigantic plan, to bring the hordes

of the turtle-creatures from earth to moon. They must be brought soon, for by this time the great glaciers had covered almost all the earth; yet here the laboring turtle-creatures upon the moon met another obstacle. How were they to bring those vast hordes from the earth to the other side of the moon? They could not drive them up in cylinders straight toward that other side, since that other side was never turned toward earth. Neither could they bring them up to the moon's earthward side, a barren and airless desert of great wreckage, and transport them around in air-tight craft to the other side. They had done that with their first thousands of workers, but could not hope to do so with all the turtle-creature millions on earth, in the limited time that was left. Pondering this difficulty, the turtle-creatures on the moon again brushed aside all difficulties to solve the problem in the most direct manner.

"Their solution of that problem was a truly titanic one. They planned to pierce a great shaft clear through the moon, from its earthward side to the other side. That shaft, with an airlock, opening in the heart of their great air-tight city on the other side, would enable them to bring their hordes straight from earth to that other side, across the gulf of space in the great cylinders, driven by the mighty beam, and on through the great shaft, through the moon, to emerge into the air-tight city on its other side. So the turtle-creatures on the moon commenced work at once upon that great project, and in heated frenzy they labored upon it to complete it in time to bring their races from earth. Using the

great vibrations they had used before, which destroyed matter by destroying the affinity of its atoms, they steadily blasted a great circular or cylindrical shaft straight through the moon's sphere. That shaft opened on the moon's earthward side in the great crater that we now call Copernicus, while its end at the moon's other side was just beneath the great plaza that lies at the center of their city.

"In that plaza, then, at the shaft's end, they placed one of the great disks to shoot forth the mighty lightpressure beam, a disk which could shoot its beam *downward*, through the shaft, through the moon and across the earth, and *upward* toward the great transparent roof above. The beam, if turned *upward* from the disk, would crash up and through the transparent roof above, would puncture that roof and allow the great air-tight city's atmosphere to rush out into space, of course, and slay instantly all the turtle-creatures as they had slain the worm-folk. They did not plan to use the the beam that way, but placed the great disk there and made it possible to shoot its beam upward so that, if they wished, in the far future, to visit one of the other planets with that beam, they would be able to construct an air-lock and a valve-opening in the roof just above the disk, and drive cylinders out and upward to ther planets in that way. They feared, somehow, that earth would possibly never again be fit for habitation even though the icy glaciers receded, and they desired to have some way of reaching other planets which they could not reach by sending the beam downward. This upward beam, though, was never used by

them, nor was any valve-opening ever constructed above. In time they gave up the thought of reaching other planets. But the beam still could be shot upward, by means of the great switch at the opening in the plaza.

"So, having placed the disk there in the plaza, with its beam capable of being shot downward or upward, all was ready for the coming of the turtle-creatures in all their hordes from earth. A great central disk had been prepared on earth, in what is now Yucatan, since except for a belt of the earth's tropical regions, the mighty glaciers had swept out by then until they covered all earth. At the center of a great mound they had sunk their shaft, placing at its bottom the great disk, taking to it the thousands of cylinders that would be necessary to transport the races of turtle-creatures from earth to moon. Then, when all was ready, the first of those cylinders was placed upon the disk, with others waiting beside it. Into the cylinder there went the great flying-craft of the turtle-creatures, their great flying-circles, propelled by the same method of gravitation-change they had already used, flying-circles that filled that cylinder, masses of the turtle-creatures upon them. There was a wait then, until the moon was directly overhead, the great shaft through it directly in line with the shaft in the mound. Then at that exact moment, a great bellsignal sounded automatically, the disk's mechanism was turned on, and in an instant the cylinder and its freight of turtle-creatures was driving out across the gulf to the moon.

"Out through the void it drove with lightning-speed, within in-

stants, toward the crater of Copernicus, toward the great shaft in it, clicking on through that shaft through the moon; through a great valve or door in the shaft that opened automatically before it and closed as swiftly behind it, an air-lock and valves that prevented the escape of the air-tight city's air through the shaft, through the sphere of the moon itself, coming to rest beneath the great disk there in the plaza. Instantly the cylinder was snapped aside, for even as it had flashed out through the void, others loaded likewise were flashing out after it, in the few seconds that the two shafts on earth and moon were in line.

"So each night, as moon and earth faced each other with the shafts in each, the disks in each, in line, the turtle-creatures on earth sent more of their cylinders driving out, until within weeks the last of all the turtle-creatures on earth were leaving it—leaving it in the last cylinder, turning on the beam and clicking up through space from that disk in their cylinder. The whole races of the turtle-creatures had been flashed from earth to moon on the great beam in those cylinders, cylinders that had been flashed back empty from the moon to be driven up again with new loads, until all the turtle-races had passed up thus from earth to moon, to their air-tight city on the other side of the moon. A mighty migration of countless millions of beings, from world to spinning world!

Chapter X

To Crash Down Man Forever!

"So at last, at the last moment, the turtle-cratures had saved themselves from doom, had moved



in a mighty mass from earth to moon. Setting in all their hordes in their mighty city upon the moon's far side, they took up life as comfortably and as safely as on earth. The air they breathed was made for them artificially by their great atmosphere plants, and enclosed beneath the mighty transparent roof. The power of the moon's gravity had been increased to that of earth by the generators beneath their great city. Nothing had been forgotten that might serve their comfort, and they had found in their mighty air-tight city on the other side of the moon a safe refuge from the great glacier floods that were rolling across the earth.

"For on earth, as they could see now, those mighty glacial tides had forged on until all but a small part of earth's surface was covered by them, grinding on across the earth and obliterating beneath them the crushed and shattered cities of the turtle-creatures over which they forged. Safe on the moon's other side, though, the turtle-creatures gave but small attention to earth, beginning again their life in that strange city. Gradually they became accustomed to the long lunar days and night, each of approximately two weeks length, and by scientifically changing some of the characteristics of their own bodies were able to live as usual

through the dusk of the lunar nights, nights but softly illuminated by the circles of light they had set in their buildings' sides, and they were able also to remain in unhindered life and movement during the two weeks of the lunar day, not being bothered by the length of that brilliant day. They became, in fact, completely habituated to the moon, almost forgetting that they had ever lived upon the earth.

"Almost forgotten, too, was the moon's earthward side, since hardly ever did any venture from their comfortable air-tight city on the far side to the airless, savage and barren surface of the near or earthward side. Upon that side still yawned the mighty craters gouged out by the great beams, and about and among those craters there lay the remnants of the great wrecked city of the worm-folk that had once covered the moon's earthward side, the remnants of the great gleaming roof that had once covered that side also. Those great gleaming fragments of the shattered roof lay most thick about the crater that we call Tycho, though they extended here and there across the moon's whole earthward side. Because of that, because their gleaming surface reflected back the sunlight brilliantly, Tycho and the brilliant- gleaming region about it were to be a great mystery to man and the science of man, who could not know that those great gleaming regions marked the last shattered remnants of the giant roof of the worm-folk, that had once extended over the moon's whole earthward side.

"Forgotten by the turtle-creatures, who could not even see it from the great city on the moon's other

side, earth worked on toward its destiny. The great glaciers that had covered almost all its surface moved northward and southward almost to the equators, lay for ages upon that surface, so that the earth was a barren world of ice, a great frozen desert. It almost seemed that the thought of the turtle-creatures had been right and that earth would never again be the abode of life. But at last the sun's heat falling upon its central regions, the glaciers that lay over those regions began to recede. Slowly, sullenly, but steadily, the great ice-floods receded back to the polar regions to north and south, until once more the rest of earth's surface lay warm and habitable, scarred and scored with deep valleys and great mountain ranges by the glaciers that had passed over it. The ice terror had passed and earth was again a world in which life could flourish.

"Life, though, had been almost wholly wiped from earth's surface by those grinding floods of ice. The great race of the turtle-creatures was gone, fled to the moon, and other forms of life, the great reptilian forms of earth's youth, had perished beneath the ice. Only smaller forms were left now, forms that had preserved themselves in sea and on land, and now these remaining forms began to increase and multiply as the glaciers went back and the earth grew warm once more. Changing into a myriad protean shapes, climbing upward on the path of evolution with the spur of cruel conditions ever behind it, life surged through countless forms, from saurian to mammal, while at last, out of the mammal forms, there rose the first crude ape-like creatures that were the progenitors of man.

"So, at last, out of that ruck of changing species, of shifting forms and characteristics, there rose the races of man, moving upward with ever-increasing intelligence, from troglodyte to savage to modern man. And man had become lord of all earth, never dreaming or suspecting that long before him there had ruled on earth the turtle-creatures, whose civilization and science were as great or greater than that of man. For though men sent their vision searching into space, as their predecessors had done long before them, though they saw and photographed the giant craters on the moon, the strange-gleaming patches upon that moon, never did they dream of the true terrible origin of those craters and gleaming patches. Never did they guess that even then, out on the other side of the moon which man had never seen, there stretched the colossal, air-tight city in which the turtle-creatures in their millions still went their ways.

"Nor did the turtle-creatures, within that city, have more knowledge of this new race of man that had risen to be lords of earth. For long ago, as I have said, the turtle-creatures had lost all interest in the earth from which they had come. Comfortable and safe in their strange, great moon-city, they had noticed that the glaciers had receded, had supposed that new forms of life would arise on earth, but had not been enough interested in the possibility to send even a single party of explorers back to earth. The great disk in the central plaza of their city, and the shaft that led down through the moon from it, were unused, during all those centuries, those ages. The turtle-creatures had

forgotten earth.

"So, forgetting it, they lived on in their moon city, but at last there came to disturb their safe life the looming specter of a great menace that threatened their existence—a menace slower and subtler and less spectacular than the glaciers that had driven them from earth, but fully as deadly. Their artificial air and water supplies threatened to fail them. For, as I have said, there was no air or water upon the moon, save a little frozen vapor lingering in its craters. Artificially, though, the turtle-creatures, like the worm-folk before them, had manufactured their own air and water supplies by the great atmosphere and water plants set here and there in their city.

"These great plants produced their air and water by a combined process of chemical analysis and synthesis, carried on, on a vast scale. Their first step was to take great quantities of certain of the moon's compounds, compounds containing hydrogen and nitrogen and oxygen. Then, by treating these in great masses with an altered form of their matter-destroying vibrations, they destroyed the chemical affinity of the atoms of those compounds, loosing those atoms one from the other, breaking up the compounds into their original elements. The atoms of hydrogen and oxygen and nitrogen thus released were drawn off from this first disintegrating process into huge underground tanks or containers in which the gases were stored,

"From these great containers the gases were drawn forth at will, and hydrogen and oxygen atoms were mixed together automatically, two atoms of hydrogen to one of

oxygen, to form H_2O or water. In the same way four nitrogen atoms would be combined with one of oxygen, in vast quantities, to form air. This is, of course, but a brief outline of the turtle-creatures' process, which was in reality more complicated. From these great central mixing plants the water supplies were piped to every portion of the moon city, while the atmosphere supplies were automatically loosed at the exact rate required to replenish the atmosphere beneath their great roof. The whole of this vast process was carried on by automatic machinery, requiring but small attention on the part of the turtle-creatures, and they saw no reason why it could not be continued indefinitely.

"But now, at last, they had come to see that soon those processes would come to a halt, for lack of the elements that were vital to them.

"More and more difficult was it becoming to procure supplies of the compounds which they disintegrated to get their supplies of nitrogen and oxygen and hydrogen, since it was but a certain number of compounds that could be used by their process with any degree of effectiveness. And these compounds were not plentiful in the moon's materials, and had already been used for ages, by the turtle-creatures and by the worm-folk long before them. Deeper into the bowels of the moon they penetrated for the compounds that gave them their water and air, but they began to see that before long those compounds would be almost wholly unavailable, and the moon would no longer be habitable for them.

"Realizing this, they began to

look about them once more for a new place of refuge from the doom that was once more overtaking them. Naturally enough, they had no inclination to become a totally extinct race—at least, not without a definite struggle for survival.

"Their first thought was of the sun's other planets, since there in their central plaza they still had the great disk whose beam could be shot upward and out into space, once they constructed the necessary air-lock valve in the transparent roof above it. But after considering the situation, they saw that escape to one of the other planets was out of the question, because even if there were one habitable for them, it would take a considerable time to transport all their hordes across the space from the moon to such a planet. And they knew that they did not have much time in which to work—they knew their time was very limited.

"Seeing this, they turned their thoughts, after the passing of ages, back to earth once more, to the earth from which they had come. Peering across the gulf toward it with their instruments, they saw that, as they had noted before, the great glaciers had long ago receded, and saw, too, that earth had become warm and habitable. To pour all their hordes back to earth from the moon would take little time, since the disk at their city's center could shoot their cylinders straight down their great shaft through the moon and across to earth. The shaft on earth, too, they thought, and the disk inside it must still be lying unharmed in the depths of what is now Yucatan, since they had sunk that shaft in the great mound where it was

protected from the shifting dirt of ages, and they knew that the great glaciers had not quite reached the region in which that mound was located.

"Earth, then was a safe refuge for them again, the more so because they had originated there and its gravitational power would be what they were always accustomed to, on earth and on the moon.

One thing, however, prevented them from pouring down to earth in all their hordes at once. During the ages that had passed, some new race of intelligent being might have arisen on earth, which the moon-creatures would have to fight with, when they descended on earth.

"They decided, therefore, to send an exploring party down in a single cylinder, to make certain of earth's present habitable condition and to find out the power and intelligence of any race that happened to have risen to supremacy on this planet.

"A hundred or more of the turtle-creatures, therefore, rose on their flying-circles and moved into one of the great cylinders. That cylinder was snapped into the framework beneath the great disk and the beam was turned on.

"A moment more and that beam was driving the cylinder down through the shaft, down through the moon and out its earthward side, out across the gulf once more, to flash down into the great Yucatan and come to rest within it, flying across the void from moon to earth at the moment when the two shafts were in line as they had been before.

"Down into the shaft in Yucatan their first raiding party had dropped, a shaft near which fate had brought our own scientific party. Then out of that shaft on their flying-circles

came the moon raiders, the turtle-creatures, slaying Willings and the rest, imprisoning me as a specimen of earth's races. Swiftly and scientifically they proceeded on their survey, taking all the instruments, books and papers in our tents, taking samples of earth and air and water, taking specimens of the bird and beast and insect life about them, gathering all the information possible from about them, to take them back with them to their fellow millions in the great city on the other side of the moon. And back to that city on the next night they had gone, back up to the moon and through it to the great moon-city on its other side, back with me and with their gathered specimens and data to the great Council of Three Thousand before which I had been taken and subsequently questioned.

"Then I was imprisoned in the great Council Building, and those turtle-creatures who instructed me in their strange tongue and who told me this gigantic saga of the turtle-races, this tremendous chronicle of eons of time and vast voids of space and tremendous dooms of worlds, that I have just told to you, had come. And hearing that great tale, I Howland, understood at last the true awful significance of that swift descent on earth by the moon-raiders, understood at last what terrible doom it was that hung over the earth now as the turtle-creatures prepared to pour down upon it once more. But then, as I learned enough of the turtle-creatures' tongue to roughly speak and understand it, I was taken again before the Council of Three Thousand for questioning.

There, with the great Council about me and the Council of Three questioning me, they examined me

as to the state of affairs on earth. They had learned much, I found, from the books and papers and instruments that their raiders had brought back from our camp, and which they had been soon able to decipher. But when the Council of Three questioned me, I refused absolutely to answer them. Well I knew that my refusal would gain earth no respite, that death was the doom that awaited me for such refusal, yet I would not help them in the slightest in their terrible plan that meant the annihilation of the world of man. And when the Council of Three saw this, they ordered me back to this cell, to be kept alive, so that their scientists might experiment on me, in the hope of finding some way by which human intelligence could be blotted out without affecting the human body, so that when they will have conquered earth they could spare from the annihilation of its peoples enough humans to serve them as slaves and machine-tenders.

"It was only a few days ago that I was brought back to this cell, for while I had been held in it and had learned their tongue, the long lunar night had waned and the brilliant lunar day had waxed across the city, and had waned to give place to the dusk of night once more, the dusk of this night that is about us now. During night and day and night again, without ceasing, I had seen their great preparations going on unremittingly in all the mighty city about me, had seen their flying-circles massing their great stores of weapons and instruments and materials, preparing to pour into the great cylinders beneath the plaza, to flash down in those cylinders to earth in their first

great attack on the inhabitants of that planet.

"Within days more, as I had heard from the Council, that attack would take place, the first masses of cylinders flashing down the beam to earth when the bell note sounds to mark the time when the shaft through the moon and the shaft on earth are in line. Each twenty-four hours, during the last days, I have heard that distant great note, and each one seemed a note kneeling the doom of our world. Several hours ago, when I heard the note again, I knew that the next time it sounded it would mean the end, for when the bell-note sounds again, when the two shafts are in line as they will be again in a few hours, the time will have come for the great attack and the moon-creatures will be pouring down to earth on the great beam in their cylinders. I did not dream, though, when I heard that last note sound that you three were flashing up from earth and disk on earth, upon the great beam in your cylinder, through the moon and out into the moon-city to find me. I never dreamed that, until Carson and Trent were brought and imprisoned here with me, to serve with me, as specimens for the experiments of the turtle-scientists.

"Now, Carson, Trent and Foster, you know all; you know the great doom that is looming and gathering above our earth. For even now, in the great city about us, the turtle-creatures are completing their last preparations, gathering together all the flying-circles and forces that will be launched down upon earth. Within hardly more than a dozen hours the great bell-note from the plaza will sound again, will mark

once more the moment when shaft on earth and shaft through moon are in line. And when that signal sounds countless cylinders in masses, filled with terrific, irresistible hordes of flying-circles and turtle-creatures, will be driving down to earth on the great beam! Will be pouring down to earth to annihilate humanity as they annihilated the worm-folk, to crash down man and the supremacy of man forever, and make the turtle-creatures once more the masters of all the earth!"

Chapter XI A Fight for Freedom

"The turtle-creatures once more the masters of all the earth!"

Howland's words, in the silence that followed his story, seemed vibrating in the little cell about us, like the note of some great warning bell, a bell that was striking the doom of earth. I seemed to see, in that moment, a swift succession of pictures in the dusk of the place; seemed to see cylinders in hundreds, thousands, flashing down from moon to earth on the great beam; seemed to see those cylinders giving forth their freight of flying-circles and turtle-creatures, those flying-circles flashing north and south and east and west from the shaft in Yucatan, out over all the world of man; seemed to see dreadnaughts and artillery and airplanes vanquished and destroyed, reeling back before the swift and mighty flying-circles, the deadly vacuum rays, millions of man's great cities' inhabitants going to death beneath those rays; seemed to see earth covered once more with the giant faceted buildings of the cities of the turtle-creatures,

as it had been once long before, with those monstrous creatures ruling earth from pole to pole and the races of man annihilated, save for a few mindless things left as slaves to the turtle-creatures!

Beneath that awful vision my brain reeled, while Carson and Trent and Howland beside me stared with brooding eyes that held a horror as great as my own. Through the triangular opening in the wall we could gaze out over the great dusky moon-city, swarming still as before with turtle-creatures and flying-circles, with all the mighty hordes of the moon-creatures, gathering their forces now for their first great attack on earth. And, gazing out across that mighty city with the titanic saga, which Howland had just related, vibrating still in our minds, gazing out across that great city that stood where eons before the strange city of the worm-folk had stood, our minds could grasp but one great fact of all that crowded upon them, could comprehend but the one great horror of what had just been revealed to us.

"The turtle-creatures once more the masters of all the earth—and we who alone could warn earth imprisoned here!" exclaimed Carson.

"Imprisoned here without hope of escape," assented Howland somberly. "And within hours, now, their great attack begins. When the great bell-signal beneath the plaza sounds three notes, it will be the signal for the turtle-creatures' flying-circles and forces across all the city to start toward the plaza, to enter the cylinders beneath it so that when the single great note sounds they may be shot down to earth on the beam."

But is there no hope of escape?"

I cried. "Isn't there any way by which we, who alone know of it, can halt this deadly invasion?"

Howland looked at me thoughtfully. "There is a way," he said slowly, and afterward I was to remember his words, "a way by which the menace of these turtle-creatures might be removed forever, could we but escape from here. Yet how can we win free of this cell?"

Hopelessly we looked about us. The cell's door, which seemed to the eye quite open and unbarred, was in reality barred more securely than by steel, closed unchangeably to us by the sheet of invisible force across it, through which no matter could penetrate. Nor, when we turned to the window, were our hopes raised in the least. For that window, though quite open and large enough to allow us to pass through it, was set directly in the outer wall of the great building, in one of the great smooth facets of that building's side. Below and above stretched the mighty structure's wall, for it was hundreds of feet from our window to the crowded streets below, and almost as great a distance to the roof. The facet in which our window was set, too, was quite vertical, the one beneath it slanting inward and the one above it slanting inward, too, like the face of a great gem exactly. Without rope of any kind, we knew that to attempt escape from the window would be but to meet instant death.

Yet we could not give up hope of escape, hope of finding some way to escape from our prison and to get to the great chamber beneath the plaza, to get to one of the cylinders and back to warn the earth. We examined every cor-

ner of our dusky cell, inspected door and window exhaustively, but in vain. We could find no way of escape, while through the corridors outside we could discern a ceaseless movement of turtle-figures, bearing their loads of weapons and instruments and materials up through the great building to its roof, loading them, apparently, upon the flying-circles that rested there awaiting the great signal of three notes that would send them and those from all the city toward the plaza to enter the cylinders beneath it. Soon now, within a few more hours, we knew, those three warning notes would be sounding; at the thought a rage of despair seized us. It was then that Howland, who had sat motionless, wrapped in thoughts of his own, beckoned us to his side.

"There is but one chance in thousands for us to escape from this cell," he told us, quickly. "But with only an almost certain death ahead of us, we must take that chance, and soon. Each twenty-four hours food has been brought me here by two guards, and if they come as they should again, within the next hour or so, we will have that one chance to escape."

Then he went on to explain to us the plan that he had formed, while Carson and Trent and I listened intently. Simple enough and desperate, too, was the plan he proposed, yet it was at the same time the one way by which we had even the faintest hope of escaping from our cell, so without further discussion we agreed upon it. It seemed possible that by it one or two of us, in any case, might be able to escape from the cell, and it was agreed that whoever did so should make for the roof and endeavor to steal

a flying-circle and head toward the great plaza and the chamber of cylinders beneath it. The whole scheme, of course, was perhaps the most desperate and reckless one possible, yet it was, as Howland said, a chance, and as such we grasped at it eagerly. Then, since all depended upon the coming of turtle-guards with food, we waited anxiously for their coming, when we might put the scheme into effect.

Now, looking back, it seems to me that the time that followed was almost the most agonizing I ever spent—the time in which we sat motionless and silent there in the dusky cell, awaiting the coming of the two guards. Carson watching at the force-defended entrance, Howland and Trent and I seated across the room, we waited in silence. And never, surely, could there have been a stranger scene than the one we must have formed. Four men, white-faced and unmoving and silent, seated there in the dusky cell in the mighty building's side, with groups of busy and monstrous turtle-creatures pouring through the corridors beyond, with other masses of turtle-creatures surging through the streets of the colossal dim-lit city about us, with flying-circles throbbing thickly through the air, all gathering here on the moon's far side, beneath the great transparent roof that covered that side, to pour down within hours, now, upon earth and the races of earth.

Slowly the minutes passed, their passage unmarked by any change in the unceasing dusk of the city about us, nor in that city's activities. Would the turtle-guards not come, after all? Had we been forgotten in the great preparations going on, and was our last wild chance to

be lost to us? Tensely, despairingly, we waited, knowing now that but little more than an hour remained before the three great notes from the plaza would sound, before the moon hordes would be massing toward that plaza, and the great chamber beneath it. Now we heard the activities in the city without, in the great building's corridors, slowing, ceasing, and we looked at each other with startled eyes. The turtle-creatures' preparations were complete and their first great attack was ready to be launched!

There was a sound as of many turtle-creatures moving down from the building's roof through its interior, a sound of many heavy steps and of deep, bass voices, and then these seemed to have passed, and again there reigned a sudden silence in the great building and in the city without. Gazing out from the window we could see that the great flying-circles throbbing to and fro seemed to have settled in masses upon the roofs of the great buildings, that the turtle-hordes were gathered together in crowds, surging no longer through the streets. They were waiting—waiting for the great force which within the hour would be pouring into the cylinders beneath the plaza, to flash down to earth! As realization of all this, of our swift-waning time, struck me, I wheeled from the window with an exclamation on my lips. But before I could utter it, Carson had whirled silently from the door by which he watched, his hand raised toward us.

"The turtle-guards!" he whispered. "They are coming!"

Struck motionless and silent by his words we listened for an instant, then we heard clearly the sound

of heavy steps approaching us on the metal floor of the corridor outside, of deep bass voices rapidly nearing us. At once, then, we put into execution the plan we had formed, for these coming ones could be none other than the guards, the turtle-guards with our food. Throwing ourselves upon the cell's floor therefore, we lay there quite motionless, I near the door, Carson and Trent a little away from me, and Howland at the dusky room's other side. There, lying completely stiff and motionless, with closed eyes, we awaited with trembling nerves the coming of the turtle-creatures.

A moment more and they were outside our invisible force-door, halting there. Lying facing them, without moving a muscle of my body that might be noticed, I opened my eyes slightly and saw them through my lashes, halting outside. I saw one reach forth to touch a stud on the wall outside, heard a click and then, though all was as before, I knew that the force-door had been lifted from across the opening. Then through that opening came carefully, watchfully, the great turtle-creatures, and as I saw them I almost cried aloud in my despair. For these were not the two guards that had brought Howland's food, and whom we had expected, upon whose coming our plan had hinged! These were five in number, four of them armed with ray-hemispheres that they kept trained upon us, the other unarmed and seeming to command them, an air of authority apparent in his tones and manner. And as I saw him I comprehended in a flash the thing that a malign fate had put upon us. These guards and that commanding one came to our cell only

to take us to the laboratories of the turtle-scientists!

Utterly cold went my heart as I divined this, yet even so I moved no muscle as the four guards and their leader came in toward us. I saw them stop in amazement as they looked down upon us lying prone upon the floor, saw their weapons turned towards us still, as though fearful of some surprise. The leading turtle-creature, surveying us in something like surprise, spoke aloud to us in his deep tones, evidently to arouse us, but we didn't move. We remained stiff and motionless. He reached a taloned foot or paw toward me, who was nearest to him, stirred me with it; but despite the cruel prodding of those talons I lay limp, unchanged. Then, quite perplexed, apparently, he bent down over me, to examine me. It was the chance for which I had waited. As he bent over me, as his face came close down to mine, my arms flashed up and gripped him!

The next instant was one of such wild combat and confusion in the dusky little cell as to defy description. At the instant that I grasped their leader, the four guards had swung all their weapons toward me, but did not dare to loose their rays in that moment lest they destroy their leader, too. And in the instant that their weapons had turned toward me, my three friends had leaped up also, and were upon the guards! Then we were whirling about the little cell in such fierce, swift battle as I had never known before. Grasping still the turtle-creature with whom I struggled, I strove to attain upon his snaky neck the hold which experience had taught me was the one vulnerable point in these shell-cased

monsters. Before I could gain that hold, though, his own tremendously powerful limbs had grasped my own throat with taloned paws, and swiftly then were choking me!

As I struggled madly there, I caught sight of Carson swaying in a death-grip with another, striving with taut muscles to prevent the thing from bringing his hemisphere into play; I saw Trent, who had grasped one of the creatures by the neck, send that creature slumping down in death on the floor and leaping upon another, who sought to escape through the open door; saw Howland rolling at the room's side with still another, who seemed to be overcoming him; heard the mingled sounds of deep vibrating voices and hoarse exclamations, of struggling bodies and the clang of metal, as the weapons of the guards struck the floor. Then all about me seemed to be darkening before my eyes, as I felt the relentless grip on my own windpipe tightening!

I knew that a moment more of that grip would mean the end for me! I gathered all my strength for a supreme effort, and struck out at the turtle-creature who held me with all his force. The great blow broke loose his grip from about me, sent him whirling back against the room's far side, and as he reeled back I looked sharply about me, saw that at the same moment the antagonists of Howland and Trent, beside me, had broken from them, back to the room's side with the other, the three turtle-creatures facing us at that moment with Carson struggling somewhere behind me. All this I saw as I straightened there, then saw in the same instant one of the three

monsters before us reach swiftly to the floor, to something round and gleaming there, to one of the deadly hemispheres which in the next moment he had swung swiftly straight toward us!

In that wild instant I knew that nothing could halt the death from that hemisphere, the deadly ray that would leap from it toward us, yet I gathered myself even then for the leap that I knew was hopeless. But as I did so, there was a little clicking sound behind me, a broad ray of green and misty light drove past me from behind, and then that ray had struck the three turtle-creatures at the room's other side, had struck them with a detonation that in the little room was thunderous, deafening! And as it did so, I saw them swaying, reeling, falling; saw their bodies suddenly puff, swell, explode, falling in shattered, broken masses to the room's floor! I turned, unsteadily, to see that at the critical moment, Carson had overcome his own antagonist and had wrenched from him, as he slumped downward, the hemisphere whose ray he had loosed upon the three creatures opposite us!

Panting, torn, wild-eyed, we gazed unsteadily now about us, listening tensely. The detonation of the green vacuum ray had seemed titanic to us in the little cell, but apparently that cell's smallness had muffled the sound effectively, since there was no sound of alarm in the great building about us. A moment we listened, then reached toward the hemispheres on the floor, grasping their handles with our fingers on the control-buttons in those handles; then we were moving toward the door. Out that door we went, leaving the silent bodies

of the five turtle-creatures in the dusk of the cell, out through the opening that was unbarred now by the invisible force-sheet, to find ourselves in the dusky corridor that led toward the left, toward the edge of the great Council Hall and the corridors leading upward.

"Less than an hour left!" Howland whispered as we crept forward down that corridor. "Pray God we get to the roof before the three warning-notes sound!"

It was a prayer echoed in all our hearts as we moved silently on. Swiftly the time was passing. The moment was approaching when earth-disk and moon-disk would again be line, would permit the moon-hordes to flash down to earth. So, tensely, with set faces, we crept on down the corridor, until we came at last to the place where it ran into the larger corridor, the one whose stair led upward. We had not seen any trace of turtle-creatures as yet, and the whole building seemed strangely silent about us, but as we entered the larger corridor, we gazed watchfully along its length. In it there were no turtle-creatures visible, but before us, at the corridor's other side, there yawned the depths of the great Council Hall, along which it ran. Cautiously we crept toward it, toward the low rail that protected the corridor from the great hall's depths, then peered down over that rail forgetful of all else for the moment, at the sight beneath.

For there upon the floor of the mighty soft-lit hall whose vast, curving walls dropped beneath us for hundreds of feet, there sat now in the myriad seats, row upon row of silent turtle-creatures! Turtle-creatures who filled those seats, in strange, silent rows, the great Council

of Three Thousand who ruled all these turtle-races! Silent, listening, they sat there, far beneath us, while at the clear space at the great floor's center were the three creatures whom I knew to be the Council of Three. One of them, now, was standing was speaking to the three thousand about him in deep, strong tones, tones that came vaguely up to our own ears.

It came to me then, as we crouched there in the narrow gallery high above the great hall's floor, that it was now, on the very eve of their titanic expedition back to earth, that the Council of Three Thousand beneath us had been gathered. That the speaker at the room's center was addressing them, who soon would be pouring up to the roof and out on their flying-circles to the plaza, to the cylinders beneath it, that would carry them down to earth. He seemed to be exhorting them, reminding them of the power that had once been theirs on earth, reminding them of the doom that waited for all their races unless they conquered, unless they wiped earth clean of the races upon it, and won it for their own. Gazing down toward them, Carson and Howland and Trent and I stared as though fascinated as well we might be, by that strange and solemn scene.

A moment more we gazed, and then Carson straightened, motioning silently to us, and we too straightened to go, and to start up toward the roof. But in the moment that we did so there was the slightest of sounds from behind us, and then before we could whirl around we had been gripped from behind, gripped by great taloned arms that grasped us, held us fast! Even as I flung myself around

with wild fury in that grip I knew that we had been discovered, that a party of turtle-guards in the corridors had found us there, and crept up behind us. I heard a choking cry from Howland, as the others struggled wildly these beside me in that moment, and then as I, too, struck out and backward madly at the monster who held me from behind, I felt him lift me swiftly in his powerful arms and swing me out over the low rail before me, to drop me to death on the metal floor hundreds of feet below!

Chapter XII Up The Wall

I think now that the terror I felt in that swift moment, when I hung above a dreadful death, so numbed me, that I was without power of motion. I remember being thrust out over the low rail, of the floor of the great room far below seeming to rush up toward me, the massed creatures upon it still unconscious of our struggle high above them, and then as I closed my eyes, and abandoned myself to my fate, I felt another grip close upon my shoulder, and after an agonizing moment felt myself being pulled back over the rail. As I touched the corridor's floor again, I saw that it was Carson who had saved me, after felling with a great blow the creature who had held me.

Beside me two others of the creatures lay still, and Howland, bleeding from a great cut in the side of his head, was raising the hemisphere in his hand to crash it down upon the head of the creature with whom he was struggling. Carson, as I found, had escaped the first grip of the creatures

when they had crept up behind us, and had turned to crash down his heavy weapon upon them in swift blows that had felled two of them, Trent and Howland disposing of the other two. Luckily for us, the combat, wild as it was, had lasted for but a brief moment, because the creatures, feeling certain they would capture us, did not use their ray-hemispheres, for fear it would have sounded the alarm to the massed thousands of the Council far beneath. As it was, though, our fierce struggle had been so high above them that no sound of it had come down to them, and none had looked up toward us.

By this time we were moving forward along the corridor, toward the narrow stair that led upward to the next level, for we knew now that not many minutes remained to us if we were to reach the plaza and the cylinder beneath it in time. Carson leading, we ran toward that stair, but then stopped short as we gazed up. For in the corridor above we could discern through the dusk four more turtle-guards, lounging at the stair's top; we could see and hear other parties of them that seemed to ceaselessly patrol through the corridors and stairs clear up to the building's roof! It was apparent that we could never reach that roof, could never reach the flying-circles upon it; we could never go past the countless turtle-guards that were between us and the roof. For a moment we stood there in utter despair.

Then suddenly Carson's eyes lit up. "We can't get up through the building's interior to the roof," he whispered, "but there is a chance."

"A chance to get to the roof?" Howland asked, and Carson nodded.

"Yes," he said; "up the great building's outside wall!"

A moment we started at him uncomprehending; then he pointed swiftly to a group of mechanisms and materials stacked along the corridor's side. We had passed them unheeding before, but now Carson's eyes were upon them.

"That drill-mechanism there," he said. "With that and the metal bars beside it we can make it up the wall!"

Then as he reached, picked up swiftly the drill-mechanism he spoke of, we understood. It was a metal affair some eighteen inches in length, the drill proper being of pure white metal much harder than the metal of the buildings and streets of the city, and more than an inch in diameter. The white drill projected from a bulbous casing on the side of which was a small control-switch, and as Carson touched this, it set the drill whirring swiftly, and he placed it against the metal wall beside us. We saw the white drill eating into that metal as smoothly and as swiftly as through wood. He pointed to the short metal bars that lay piled beyond, bars that were large enough to fit snugly into the holes made by the drill, and at once we understood his plan. Desperate as it was, we realized it was yet the one remaining chance to reach the roof, since now the minutes were fleeting fast and we could never pass through the numberless guards who filled the corridors above us.

So each of us grasping three of the short thick bars, and with the drill in Carson's hands, we raced back along the corridor, back to where the four guards with whom we had struggled a moment before

still lay. One of them was stirring, showing signs of life, but we paid no attention to him in that tense moment, racing back down the branching corridor toward the cell from which we had escaped. In it lay the bodies of those whom the green ray had slain, and over them we raced toward the triangular window. Then Carson, drill in his grasp, was drawing himself up to that window, balancing there within it and drilling swiftly with the mechanism in his grasp a deep little hole in the metal of the wall just above it. In a moment that hole was made, and withdrawing the drill he placed in the hole one of the metal bars. It fitted snugly in it, as before, forming in effect a solid bar projecting outward for two feet from the great building's smooth side, above the window.

Clinging to this bar, therefore, and with feet still in the window's opening, Carson reached upward and swiftly bit with the drill a like hole a yard above the first. Into this also he inserted a bar, and then standing on the first bar, clinging to the one above it, he reached upward higher with the drill, boring swiftly a similar hole, inserting in it another bar, and moving upward thus a step on the great ladder which he himself was building in the great building's wall. Far outward and below us there stretched the great lunar city, its crystallike buildings looming through the dusk, their roofs crowded with flying-circles and the streets crowded with turtle-creatures. These in the streets, though, could not see through the dusk, apparently, for there came no alarm from beneath as Carson continued to creep upward.

Now Trent was following him, using his own bars in the holes which Carson had bored, creeping up the mighty buildings smooth faceted side after him, inserting his bars in the drilled holes pulling himself up from bar to bar, and then drawing up after him the bar beneath him and using it to insert in the hole above. Howland, too, as Trent moved upward, was following him, using his own bars in the same way. I waited there at the window until Howland was a half dozen feet above me, and then with beating heart I prepared to follow him, swung myself out of the window, last of the four, and inserted one of my three bars into the hole just above the window.

The bar fitted snugly, like the others, and in a moment I had placed another in the hole above it, was clambering up onto the first bar, as the others had done, and placing the third in the hole above. Then pulling myself up onto the second, grasping the third, I reached down and withdrew the first from its hole, straightened and placed it in a still higher hole above the two to which I clung. And thus I made my way up after my three friends, Carson and Trent and Howland. We were like four great bat-like creatures, moving up the great building's vertical wall through the shrouding dusk.

Up—up—bar after bar, hole after hole, a steady, unvarying progress that became semi-automatic to me. Once I looked down through the dusk at the crowded streets far below, the great turtle-hordes that filled those streets, then as an intolerable dizziness swept over me I gripped my bars tighter and forced myself to look upward. Above me I could see Carson, moving upward still with

the drill in his grasp, boring holes in the softer metal of the great smooth wall, progressing steadily upward with drill and bars, while Trent and Howland and I followed in order beneath. And, gazing up beyond him, I could make out far above the faint gleam of the great transparent roof, the burning points above and outside it, that were the familiar constellations, the shining, unchanging stars.

Could men ever have moved upon a stranger journey than we up that mighty building's sheer, metal side? Up a building that held within it the great Council of the turtle-creatures, who when the three signal-notes sounded would be massing their great forces toward the cylinders beneath the plaza, toward those cylinders which the last single note would send driving down through space to over-whelm our earth. Up a building set there on the other side of the moon from earth, with far below as the unsuspecting masses of the turtle-creatures' hordes, and far above us the great transparent roof that alone shielded this air-filled world from airless space! Up—up—bar after bar, hole after hole, until Carson above had reached the point where the building's great upper facets slanted inward, until I myself was more than a hundred feet above the window through which we had come. And it was at that point, glancing downward for a moment, that I saw projecting from that window beneath me the hideous reptilian head of one of the turtle-creatures, gazing straight up toward us!

As my eyes met those lidless, unhuman ones beneath, I shuddered involuntarily, an utter cold of fear seeming to flood through me there as I clung to my bars on the great

building's side. I saw, in that moment as I gazed downward, that upon the creature's head was a great wound, saw and understood at once, that this was the turtle-guard whom we had seen stirring as we had raced back through the corridor, who had revived and had come after us. A moment only the creature below gazed up toward us, a moment in which I heard exclamations of horror from Carson and Howland and Trent above as they, too, saw him. Then his head had vanished inside the window, and it flashed on me that he was sounding the alarm. But even as I thought so, he had reappeared beneath, metal bars in his own grasp like our own, bars which he was inserting in the holes beneath like ourselves, one above the other!

He was coming up the wall after us!

Swinging swiftly up, bar after bar, from hole to to hole, he was coming up beneath me, and was swiftly drawing nearer toward me, while I gazed down toward him transfixed with horror. Then the cries of Carson and Howland, above, aroused me, and I thrust my bars into the holes above me, began with frantic efforts to climb faster after them. Up—up—swiftly, frantically, I climbed, but ever close to me drew that monstrous form beneath, thrusting his own bars in the holes and swinging up upon them with ease on his great taloned limbs. Above me I could see that Carson and the others were already passing up over the inward-slanting facet of the wall, climbing up that inward facet with drill and bars working swiftly, and I knew that once I reached its slope, instead of the vertical wall to which I now clung, I might progress up faster, might elude the

creature beneath. Up—up—I dared not look down toward the pursuing turtle-creature, as with pounding heart and busting lungs I clambered upward. At last I was but a few yards beneath the inward slope of the wall, Howland already upon that slope. And it was just then that something gripped my ankles tightly, and I looked down to see that the creature beneath had reached me and had grasped me!

As that grip tightened about my feet I dropped suddenly downward from the bar I held to the one which my feet had rested upon, and there, clinging to that bar with the turtle-creature pulling himself up, I struck out savagely at him, felt his own great blows falling upon me as he struggled up to the bar upon which I clung. There, both clinging to that single slender metal bar, projecting from the mighty building's vertical side, we swayed in such a giddy combat as few have imagined. Striking with all our power at each other, the one aim of both of us was to break the other's hold upon the bar, to send him hurtling down to death on the metal base of the great building, hundreds of feet below. And with his first blows the turtle-creature almost accomplished that, since those blows took me off balance for a moment and after tottering for an instant, I had slipped sidewise off the bar, was holding to it with but one hand.

As I dangled thus from the bar, the monster clinging to it, raising his arm for a blow that would knock me completely loose from it, I heard the horrified cries of Howland and the others above, saw them climbing down toward me with their bars, saw also the cold smooth metal

at the base of the great structure, far below. Then, even as the arm of my opponent swung up for a finishing blow, I had hooked my knees swiftly up over the bar, clung with them in the next moment as we struck and thrust at each other wildly again. And even as we did so, in that next moment, I became conscious of something that made the blood run cold in my veins. The bar was giving beneath our combined weight!

The slender metal bar, strong enough to support one, was bending slowly beneath the combined weight of the turtle-creature and myself, and in a moment more would send both of us hurtling downward as it gave completely. Even as it bent slowly downward beneath us, though, we two struck still madly toward each other, slipping gradually toward the bar's outer end as it bent downward, slipping until, still struggling madly, we were clinging to its very end. Then it bent suddenly, completely downward, beneath our weight and we had slipped off it, hurtling downward! Yet at the very instant that we did so a hand had reached down from above, had gripped my collar, my shoulder, and had drawn me slowly up to the bar above, while the hideous form of my opponent went hurtling downward with a deep scream!

Down, down, twisting and turning, he fell and in a moment we could see him strike the bare stretch of metal at the building's base, unobserved it seemed by any in the masses that filled the streets beyond. I turned, trembling, to find that it was Howland who had saved me, who had clambered down from above to catch me just as the bar gave way. Now he removed

the strain upon the bar on which he had pulled me by climbing to that above, and then, Carson and Trent above glancing down to assure themselves of my safety, we resumed our climb up the wall. Within moments, moving up in the same order and by the same method as before, we had passed up over the slant of the wall, and were climbing more easily up the hundred feet or more that remained between us and the roof.

Up and up still we went, Carson above boring steadily with the drill, we moving up after him with our bars, moving up with all the powers of our tired bodies, now, since well we knew that the minutes left to us were rapidly drawing to an end. All about us the great moon-city lay in the shrouding dusk unchanged, the flying-circles massed still upon all the buildings about us, but we knew that within minutes the three great signal notes from the plaza would be sounding to bring all the hordes inside those buildings, and inside the one up which we climbed, out upon their flying-circles and toward the plaza and the cylinders and disk beneath it. So it was almost frenziedly that we followed Carson on our strange and terrible climb upward, until at last he, the highest of us, was within a few feet of the great building's roof.

Pausing there, he motioned cautiously down toward us, and as we listened we heard faintly from that roof the sound of deep bass turtle-creatures' voices—many of them apparently. Carson then raised his head slowly above the level of the roof, peering across it and clinging to the topmost bar he had just inserted. Tensely we waited while he gazed over the roof, for

were we discovered, a single blow would send each of us to eternity. Then Carson gazed down toward us again, his eyes motioning us to follow; then he drew himself gently upward through the dusk and over the great roof's edge, over until he had disappeared from our view on that roof.

In a moment Trent had followed him, and was soon peering across the roof. Howland followed and I was moving up toward the topmost bar after him. I reached it and slowly raised my eyes above the level of the roof. Its vast expanse of hundreds of feet stretched away into the dusk before me, from the edge at which I crouched, and I saw that upon its surface were ranged scores of great flying-circles, that were partially overlapping or piled upon each other. They were loaded with instruments and equipment, and I saw that each had been fitted with four of the great ray-hemispheres, at regular intervals around each of the circles. In them were no turtle-creatures. Their crews, their forces, were still in the great building beneath us, but at the opening at the roof's center from which the stair led downward, there waited a full score of armed turtle-guards!

Carson and Trent and Howland had drawn themselves over the roof's edge and were crouching now behind a great mass of bulky mechanical equipment that lay between us and the flying-circles, between us and the guards at the central opening. Swiftly then, with a glance toward those guards, I followed their example, drew myself up upon the roof and crept stealthily and silently across an open space to the shelter of those mechanisms, crouching down behind them with

my friends. Then, drawing us to him, Carson whispered to us tensely.

"We'll have to make for one of the flying-circles!" he whispered. "It will bring us out into view of the guards but in the dusk they may not see us, and we've hardly minutes left!"

"Try to get to this nearest one, then," said Howland, nodding toward it. "It's now or never!"

So, crouching for a moment there behind our shelter with our eyes meeting, we crept out from behind that shelter, out on the open roof toward the nearest of the great flying-circles. We were within full view of the guards at the great roof's center, I knew, even through the twilight dusk, and I prayed that they might not turn toward us as we crept on toward the great flying-circle's edge. The guards, though, seemed to be gazing intently down the opening into the building beneath, and in a moment we had reached the great flat craft's edge, were stepping silently over its low protecting wall, toward the central mechanism that controlled it. Heart beating rapidly, I led the way toward that mechanism, my eyes upon the studs in it that controlled the flying-circle's motive power, and in moments more, moments that seemed eternities to us, we had reached that low flat cylinder at its center upon which were the controls. Then my hands were reaching toward those controls, toward the starting studs, were——

Clang! Clang! Clang!

Deliberately, majestically, awfully, they had sounded out over the colossal moon-city in that dread moment, the three great bell-notes from the plaza that summoned the moon hordes to the chamber beneath the plaza and the disk

and cylinders within it. Three mighty clanging notes of doom, precursors of that last great note that would sent the moon hordes flashing down to earth! Three titanic notes at which we, upon the flying-circle's center, crouched transfixed, and at which there came a hurrying rush of many feet from beneath! Then in the next stunned moment there had burst up through the opening from beneath masses of turtle-creatures, hurrying toward the flying-circles. Even as they emerged upon the roof, they and the guards had seen us, all at the same instant. They stopped short, stared through the dusk at us, and then their metal hemispheres had come up and a score of green shafts of the deadly vacuum ray were stabbing across the roof toward us!

Chapter XIII Howland's Way

It was at the very moment that the moon creatures had trained their hemispheres upon us that my hands had grasped convulsively the control-studs of the great flying-circle on which we crouched, and it was that alone that saved us in that moment. For even as the green beams drove across the roof toward us there had come the smooth powerful throbbing of the craft's mechanism and I had jerked the central control upward, sending the flying-circle leaping upward, just as the deadly beams reached the spot where we had been. The next moment there came terrific thundering detonations from beneath us as those rays and a score of others that stabbed toward us as we rose, created great vacuums beneath us. Then our flying-circle

was above the roof and was driving upward in the dusk with a wild uproar rising from beneath and all around us.

For across all the mighty moon-city, now, in answer to the summons of those three great notes, turtle-creatures in hordes were pouring up on the roofs, were filling their great flying-circles and slanting up in those circles all about us! And from those and the flying-circles on the great roof beneath, that were rising now after us, there came a dull roar of deep voices as they saw our own craft, we four crouching at its center, driving up through the dusk above the mighty city. Almost at once, it seemed, we had been seen by all those hundreds, those thousands, of great flat craft, and they were driving toward us, were flocking thickly from all directions upon us, great masses of the turtle-creatures visible on them!

"The plaza!" Howland was screaming above the great throbbing of our craft. "Make for the plaza—for the disk! It's a matter of minutes now till the end—till the last bell-note sounds!"

But already my hands had tightened on the control and at its full speed I was sending the great flying-circle hurtling through the dusk above the great faceted buildings, above the mighty moon city, to that plaza and that disk that was the objective of all the swarming flying-circles about us. Swiftly, as we shot on, I pointed to Carson the four green studs beside me that controlled the green beams of the four hemispheres at the edge of our great flying-circle, and he crouched tensely beside those studs, watching, as the flying-circles about us drove closer. Like

hornets aroused from their nest they seemed, swarming up in countless throngs all about and beneath us, across all the moon-city, and while it seemed madness to believe that we could reach the plaza and the disk with these hordes about us, yet with the recklessness of despair I sent the great circle splitting the air as it rushed toward the plaza.

Now flying-circles were closing in from either side, from below, and there came a hiss and flash of green misty beams from beneath and to the right, beams that drove past us as I whirled the circle to one side, and that detonated with terrific explosions about us, sending our craft reeling sidewise from them! And even as we righted ourselves and shot on again, from ahead three great circles that had caught our approach were rushing toward us and were whirling straight in our direction. I cried to Carson, dipped the great flying-circle suddenly downward, and then as we drove beneath them, our own beams had stabbed up and flashed across their surfaces as they sought to dip also, the massed turtle-creatures upon them swelling, scattering, from each other, exploding bodily as the green ray's detonation thundered about them!

Now the air about us seemed filled with flying-circles, circles that were rushing toward us from every conceivable direction, from either side and above and below, whose great green beams were whirling madly through the air in an endeavor to stop our great rush toward the plaza, their own objective. Impossible it seemed that any could whirl through such a storm of flying-circles and stabbing beams and live, yet only conscious of

the thundering hell of battle about us, I drove the circle onward across the great city, Carson playing symphonies of death upon the green studs before him as he sent our misty rays whirling to right and left and above, sending masses of the flying-circles it struck tumbling aimlessly downward into the city below, where the throngs of turtle-creatures were rushing through its streets at sight of this terrific battle above them!

But now behind us there drove down toward us a close-massed dozen of flying-circles whose beams, sweeping toward us, made me whirl our own craft lightning-like downward, down until we were rushing on over the moon-city clearing its faceted buildings by but a few feet, the close mass of our immediate pursuers directly behind us! Again their beams stabbed about us, and then as I swerved from them, an idea shot through my brain and I turned, saw that they were close behind, waited until they were but yards behind. Then before they could loose their beams, I had dived sharply downward, swiftly followed by them. In the same moment that I had dipped downward, though, I had curved sharply up once more, and before they too could curve up, their flying-circles had smashed full against the side of one of the mighty faceted buildings!

And now upward we were slanting again, at awful speed, throbbing madly upward with the myriads of flying-circles rushing still from over all the moon city toward us, up and on across that city toward the plaza that was our goal! The swift rush of our mighty craft, the myriads of flying-circles that swooped toward us from all directions, the stab of our green rays

and the thunder of detonations all about us, the hoarse shouts of Carson and Howland and Trent, all there merged in my ears into one dull great roar as with a madness of battle strong within me I sent our great craft rocketing onward. Lightning-like we flashed ahead, the great moon city beneath us giving forth a vast insensate roar of anger and alarm as we shot across it, the flying-circles about us driving still toward us from all directions with beams wildly whirling. Then from ahead, other great masses of flying-circles, crowded with turtle-creatures, were flashing toward us, and before I could swerve our rushing craft two of those onrushing ones ahead were full before us! In that instant a collision seemed inevitable, but with a wild jerk I brought the control-lever upward, just in time to raise our flying-circle a foot above the level of the onrushing ones. And the next instant we had flashed across both of them at that height, our own metal circle mowing the thick-packed creature from the surface of theirs as a scythe might do with grain!

But now Howland was shouting hoarsely in my ear. "The plaza!" he was crying. "There ahead—and the opening!"

But there far ahead now I saw it, the great clear flat circle with the great black-glittering disk set in it, the big opening near it, and I nodded swiftly. "We'll make it yet!" I cried to him. "We'll land beside the opening—beside the switch!"

For now our great flying-circle had shot forward from among the masses of thick-swarmed craft whose beams were raking about us, and hampered as they were

by their very numbers, we leaped ahead of them, rushed down toward the great plaza's surface, toward the opening at the side of which was the great switch. Upon the plaza itself and beneath there seemed to be no turtle-creatures whatever, since we knew that all had just started toward it from across the great moon-city. When our escape had given the alarm, all had been diverted from their course and were coming toward us instead. And now, as we shot down toward it, toward the great opening, the myriads of deadly beams, that had thundered and flashed about us for the last moments in a hell of vacuum death, ceased abruptly, and I understood instantly that because we were so close to their great disk and switch, the turtle-creatures could not loose more rays upon us without fear of striking and destroying their own switch and great mechanism!

Down we shot and then the next moment the great flying-circle had come to the plaza's surface beside the big opening and we were leaping from it toward that opening. The air above seemed full of flying-circles now, all the great forces of the moon massing to flash down within seconds from the great disk on the mighty beam, and as they saw us rush toward the opening, their own disks shot madly downward, to land beside that opening and rush after us, still fearing to use their rays! But now we had reached the great switch at the opening's side, whose throw upward or downward sent the mighty beam upward or downward from the disk, and now Howland had laid hold of that switch!

"Down into the cylinder!" he cried to us. "The bell-note will

sound in a second and I'll turn on the beam!"

Carson and Trent and I hesitated a moment, even in that mad moment when from all about the plaza the moon-creatures were rushing in hordes toward us, from their landing flying-circles, then flung ourselves down the narrow stair and into the great chamber beneath the plaza, across the narrow metal bridge and through the open door of the mighty cylinder that hung still in the framework beneath the disk, poised above the great shaft. We threw ourselves inside it, Carson's hand on the stud that would snap the cylinder's door shut when Howland should turn on the beam and rush down into the cylinder with us, and then as we looked back up, we saw Howland's hand tightening upon that great switch, saw the moon-creatures, the turtle-hordes, rushing from all about, and almost upon him, and then the next moment had come the terrific clanging note of the great automatic bell-signal, marking the moment when the disk on earth and this disk on the moon were in line! Even as that note clanged, Howland had flung the great switch. But as we saw him do it, we cried out hoarsely, heard the awful cries of the turtle-creatures throwing themselves upon him as they too saw, heard across all the mighty moon-world a great dull roar as though of utter fear!

For Howland had flung the switch upward!

In the next instant, the great disk above us had hummed with terrific power and then its beam had shot from it, but that beam had shot *upward!* Had driven up with all its awful power toward the great transparent roof far above!

There came in that instant, as it struck that roof, crashed through it, shattered it, a great roar of wind, a titanic thunderous roaring of all the air upon the moon-world, rushing out into airless space through that great puncture which the mighty beam had made in the roof! I saw Howland's hand flung down toward us in a supreme gesture even as the thunderous roar of the outrushing air came to us, heard Carson click shut the cylinder's door at the same instant in answer to that gesture, that agonized command, and then in the succeeding instant Howland had flung the switch back and *downward!*

There came again a terrific humming from the disk above us, our cylinder seeming to hang poised beneath that disk for an instant while the air outside it, the air in the great chamber and above it, the air of all the moon-world rushed out into the airless vacuum of space through the gigantic puncture in the roof far above. In that moment, through the great opening above, we saw Howland and the turtle-creatures about him swaying, staggering, falling, as with a thunderous roar as of riven worlds the air-tight moon-world's air rushed forth above, asphyxiating all life upon it in that one tremendous moment! Falling singly, in groups, in masses, above and over all the great moon-world, over all the colossal city of the turtle-creatures, dying as all in the moon-world were dying in that moment!

Howland's way! I cried it aloud in that moment, as our cylinder hung poised beneath the humming disk, as Howland and all the millions of the moon hordes sank to death above us with the rush

of the moon-world's air out into space. Howland's way! The way of which he had spoken there to us in our prison; the one by which the menace of the turtle-creatures could be removed forever! He had slain all the turtle-races on the moon with one great blow as they had slain the worm-folk eons before, using the great disk and beam, which they had meant to use to transport their hordes to the conquest of other worlds! The way that had meant the sacrifice of himself, yet out of which sacrifice he had reached at last to save us three, to fling the switch downward! For even at the moment that I cried out, that the moon-world above us sank down to one great death, the humming disk beneath which our cylinder poised shot forth its beam again but *downward* now, driving our cylinder down into the darkness of the great shaft!

Clinging beside Carson and Trent there at its bottom, I was aware through darkening senses of the cylinder clicking down through darkness with velocity inconceivable; of its bursting out into flaming light in another instant; of hurtling through spaces unthinkable, gemmed with burning stars, toward a tremendous brown sphere that was growing lightning-like before us. Then new dazzling light was breaking about us from ahead, I seemed pressed by a giant hand to the cylinder's floor as its awful speed slowed up, and then as the light vanished and the cylinder came to rest, I heard the click of its door opening. The next moment I could feel Carson's hands on me, could hear the voices of him and Trent beside me, and then complete darkness enveloped me, and I knew no more.

Chapter XIV Epilogue

Night lay still over the face of the earth when Carson and Trent and I finally reached the summit of the great mound, into whose shaft our cylinder had dropped. It had been hours before that we had shot down out of the gulf of space into that shaft, coming to rest upon the great disk from which we had started on our momentous journey. All, we found, was as it had been when we had shot outward into the gulf twenty-four hours before, the great disk unchanged, our rope-ladder hanging still into the shaft from above. And it was up that ladder, after Carson and Trent had revived me and we had rested, that we had come, until now we stood upon the great mound's summit once more.

Standing together there, motionless and silent, we gazed out. In the black vault of the heavens overhead there burned the brilliant tropic stars, but it was not toward these that Carson and Trent and I were gazing—it was toward the brilliant silver disk of the full moon, sinking down now toward the western horizon with the passing of night—a shining shield which we three watched in silence, gazing out toward it over the moonlit jungles. Toward its craters and seas and mountain ranges, toward that great central crater through which our cylinder had flashed on our mad journey through the moon to its other side in search of Howland, and back through which we had flashed to earth, with Howland's hand driving us back through the moon and across the gulf to earth at the moment of his own and the moon-world's death.

"Howland—" Carson was breaking the silence at last, speaking his thought. "We did find him, didn't we?—but we lost him in the end."

"Not lost, Carson," I told him. "Howland went the way he desired to go—for the world."

"Had I known what he intended—" Carson began, and then could say no more.

"We could not know," said Trent. "We could not know that Howland meant to annihilate the moon-creatures forever with their own great mechanism, and to die with them doing so. But now that he has done it, we know—and the world will know, and remember."

Silent again, we gazed out toward that shining moon-disk. And in

that silence, as our minds traveled out across the great gulf toward the colossal, airless city in which the millions of the turtle-creatures had met the death which they themselves had given eons ago to another race, Trent's words seemed echoing again about us. The world would know, and remember—yes. It would know, and would remember, how Howland alone it had been who had stricken down those turtle-creatures' millions even as they had gathered to pour down to the doom of earth. It would know, and would never forget, what a mighty debt it owed to the man who had saved it, and who lay dead now.

The End

DID YOU MISS THESE BACK ISSUES OF SCIENCE FICTION CLASSICS?

No. 1, *The Magnetic Storm*, HUGO GERNSBACH; *Politics*, MURRAY LEINSTER; *The Lunar Chrysalis*, RAYMOND GALLUN; *This of the Drylands*, HARL VINCENT; *The Murgatroyd Experiment*, CAPT. MEEK USA; *The Eggs From Tanganyika*, CURT SIODMAK; *The Skylark of Space*, Illustrated by FRANK R. PAUL; *A Portfolio of JULES VERNE*, Illustrated by FRANK R. PAUL

No. 2 *Fall, 1967: When "The Atoms Failed*, JOHN W. CAMPELL, JR.; *Service First*, DAVID H. KELLER, M.D.; *The Gostak and the Doshes*, MILES J. BREUER; *The Man from the Moon*, OTIS KLINE; *Beyond the Planetoids*, EDWIN SLOAT; *The Astounding Discoveries of Doctor Mentiroso*, A. HYATT VERRILL.

No. 3 *Winter, 1967: Invisible Ships*, HARL VINCENT; *World Atavism*, EDMOND HAMILTON; *Insects Extraordinary*, WALTER KATELEY; *The Hole That Grew*, E. D. JOHNSON; *When The World Went Mad*, RON-

ALD SHERIN; *Madness of the Dust*, R. F. STARZL; *Boomerang "Round The Moon*, DAVID H. KELLER; *A Portfolio of Edgar Allan Poe*, Illustrated by FRANK R. PAUL.

No. 4 *Spring, 1968: The Revolt of the Atoms*, V. ORLOVSKY; *Through The Craters Rim*, A. HYATT VERRILL; *The Valley of Titans*, L. A. ESHBACH; *The Miracle of the Lily*, CLARE HARRIS; *The Death of the Moon*, ALEXANDER PHILLIPS; *The Invisible Bubble*, KIRK MEADOWCRAFT; *The Eye of the Vulture*, WALTER KATELEY.

No. 5 *Summer, 1968: The Three Suns of Ev*, EDWIN SLOAT; *Monsters of the Ray*, A. HYATT VERRILL; *The Second Swarm*, J. SCHLOSSEL; *Baron Munchausen's Adventures* Illustrated by FRANK R. PAUL; *Prize Winning Editorial*, MILES J. BREUER.

No. 6 *Fall, 1968: Space-Rocket Murders*, EDMOND HAMILTON; *Missionaries from the Sky*, STANTON COBLENTZ; *Roadways of Mars*, HARL VINCENT; *The Globoid Terror*, R. F. STARZL; *The Steam God*, WALTER KATELEY; *Prize Winning Editorial*, JACK WILLIAMSON.

[Order From Page 131]





Illustrated by Robt. Fuqua

By
EDMOND HAMILTON

DOWN AND OUT, Nick Riley answered an ad for a chauffeur, and found himself trapped on an operating table. Awakening once more, he found his brain in the head of the Airlord of Amer

Chapter I

A Strange Experiment

Nick Riley hadn't had any breakfast, he had just spent his last dime, and if he wasn't lucky he would have to walk thirty miles back to New York. Yet there was a carefree grin on his devil-may-care young face, and he was whistling cheerfully as he strode up the sunlit drive and onto the porch of the isolated old Long Island house.

His knock on the front door was answered by a tall, impatient

man of forty, with a colorless intellectual face and cold black eyes.

"You're Doctor James Brant?" Riley asked. He named himself. "I saw your advertisement for a chauffeur."

Doctor Brant thoughtfully eyed the lean, shabby young man. "You're down and out, eh? No family?"

"No family and no job," Riley replied cheerfully. "You can call me a soldier of fortune, mister."

"Come on in," the scientist said. "I think I can use you."

He motioned Riley to precede him down a dim, paneled hall. The

COPYRIGHT 1938 BY ZIFF-DAVIS PUB. CO.

young man stepped into a white-tiled laboratory illuminated by bright electrics. Upon benches and tables was a bewildering array of scientific apparatus.

Suddenly a stunning blow crashed on his head from behind. He sank nervelessly to the floor.

When his brain cleared, he found himself lying on an operating table, held down by steel fetters. Doctor Brant was wheeling an anaesthetic apparatus toward him.

"What the devil does this mean?" Riley wrenched futilely to free himself.

"I'll explain," said the scientist coolly.

He went to a table and brought back a square, glass jar filled with thick, clear liquid. In the liquid floated a small, gray, wrinkled mass.

"Do you know what this is?" Brant asked. "It is the brain of a dog—and it is living. It has lived in this jar of serum for nearly a year."

"Why, that's impossible!" Riley exclaimed, astonishment momentarily overcoming his anger.

"Nothing of the sort," Brant smiled. "I have mastered the art of keeping living tissues and organs alive in serum."

"What are your serums to me?" Riley cried. "I want to know why you knocked me out and tied me on this table."

"I've succeeded," Brant continued calmly, "in keeping animal brains living in serum. I think it can be done with a human brain. If so, it will mean an immense addition to medical and scientific knowledge."

Riley's hair bristled on his scalp. "You surely don't mean that you intend to—"

"You've guessed it, Riley," said Brant coolly. "That only way I can get a healthy, living human brain

for the experiment is to take it from some living person. My advertisement was designed to bring such a person to me.

"You'll never be missed by the world, and you're of no particular value to the world. In this way, you will help a tremendous scientific achievement. It will be quite painless—you will go to sleep on this table and never wake up. Your brain will live on in the serum, unconscious, of course."

Riley could not believe his ears as he heard those calm, ghastly words.

"You're crazy as a hoot-owl!" he exclaimed. "Just because you've got some crack-brain idea for an experiment, you'd commit murder!"

"I realize," Brant admitted, "that according to human ethics, I am committing a terrible crime. But I have no particular reverence for human ethics. I am willing to incur any possible guilt, for the sake of science."

He wheeled toward the operating table another table on which were racks of glittering surgical instruments, and a large glass jar of colorless liquid.

Riley stared incredulously at the jar. He realized for the first time that if the scientist could actually do the thing, his brain would live indefinitely in that jar. He strained his muscles until they cracked, until his face was crimson with exertion, but the steel fetters held.

The scientist turned a valve, then raised the rubber mouthpiece of the anaesthetic apparatus. He paused, holding it over Riley's head.

"I'm sorry for you, Riley," he said, a ring of sincerity in his voice. "I wish I didn't have to do it. But the cause of science comes before all sentiment."

"Damn you, if I had my hands on your throat for just one minute!" Riley cried furiously.

He threshed and twisted his head aside as the rubber mouthpiece descended on his mouth and nose.

But Brant held it firmly down on his face. He tried to hold his breath. But in a moment his tortured lungs opened despite him. He gulped in sweetish gas—and sank rapidly into a whirling green darkness.

Chapter II

A Weird Awakening

Riley awoke slowly, his first sensation that of a throbbing headache. He lay, too dazed to open his eyes, trying to remember where he was. Then he remembered. Brant and his ghastly experiment! It must have been interrupted, he thought thankfully, or he wouldn't be waking now.

He opened his eyes. At once he saw that he was no longer in Brant's laboratory. This was a large, strange room with curving walls of cool, silvery metal. Sunset light from high windows shimmered off graceful metal furniture.

He sat up bewilderedly on the metal couch on which he had been lying. In the wall opposite him was a tall mirror. He stared into it at his reflection, and then from him burst a hoarse cry of horror. The man in the mirror wasn't himself, wasn't Nick Riley at all.

A stalwart, brawny-shouldered man of thirty with a dark, strong, ruthless face, closed-cropped black hair and hard black eyes, dressed in a tight black uniform—that was how he looked in the mirror. By some devil's magic, he was now in another man's body.

"God!" he cried hoarsely. "What's happened to me? I'm not myself any more—"

"Calm yourself, highness," said a soothing voice behind him in English. "I will explain everything."

Riley whirled. Beside him stood a small, elderly man with a smooth, cunning face and sly eyes, dressed in a black uniform like that which Riley wore.

"Who are you?" Riley demanded wildly. "And who am I?"

"You are Jan Strang, First Airlord of Amer in this year 2242," said the other hurriedly. "I am Garr Allan, your Chief Councillor."

"2242?" husked Riley stupefiedly. "You mean—I'm three hundred years in the future?"

Garr Allan nodded quickly. "Yes, three centuries ago your brain was removed from your body by a scientist of your own era. Your brain has lived in serum ever since, preserved by a museum as a scientific curiosity. Today, I had your brain put into the skull of Jan Strang, whose brain had been destroyed though the rest of his body was unharmed."

Riley stared dazedly into the mirror at his new, stalwart body and ruthless dark face.

"You said I'm Jan Strang, First Airlord of Amer?" he repeated thickly. "What does that mean?"

"It means," replied the crafty-eyed little man, "that you are supreme ruler of the Airlords of Amer, our race who dominate the great continent once called America."

Riley gasped. He, Nick Riley, down and out soldier of fortune, catapulted by Brant's mad experiment across three hundred years, into the rulership of half the world!

Garr Allan led him to one of

the windows. The fox-faced Councillor told him, "This building is your palace—and outside lies N'Yor, our capital city."

Stricken dumb with amazement, Riley looked out of the window. He had never seen such a city.

Its buildings were truncated, terraced pyramids that rose out of beautiful gardens of green trees and banked flowers. The pyramidal buildings were not crowded together but separated widely by the blossoming gardens. The building in whose ground floor he was, was one of the largest of all.

He noticed a slender, soaring white tower that rose out of a great park a mile away. Sleek, silver-winged airplanes were hovering above it, and other swarms of planes buzzed like flocks of shining swallows over the city.

"What's that white tower?" he demanded.

"It is the center of our power," smiled Garr Allan. "Without it, my race could not rule Amer. It is the great Power Tower from which power is broadcast to our airplanes in all eastern Amer. A similar tower at Losang serves the west."

"Radio transmission of power?" Riley asked startledly. "That's what drives all those planes—power broadcast from that tower?"

Garr Allan nodded. "Exactly. Even in your day, I believe, engineers were trying to achieve radio transmission of power. My race achieved it two centuries ago.

"We were a small European nation, then. But because of the immense weapon given us by our discovery of radio power, our air fleets could stay aloft unceasingly. We attacked this rich continent of Amer—and conquered it."

"You conquered the American

people?" Riley exclaimed incredulously. "They'd never have surrendered!"

"They have never surrendered completely," Garr Allan admitted. "Their descendants still resist our rule and live in crude subterranean cities which they excavated deep inside earth at the time of the great air war. These Groundlings, as we call them, live a barbaric, half-buried existence under earth's surface, maintaining their defiance to us Airlords.

"But of course, their attempts to overthrow us are never successful. With our radio-powered aircraft, we dominate the surface completely. Every time the Groundlings emerge and attack our cities, our planes easily beat them back."

"Why don't the Groundlings build planes of their own and use your broadcast power?" Nick demanded.

"That is impossible," Garr Allan assured him. "They do not have the secret of the power-receiver embodied in our ships. And each of our ships is so constructed that in case it should be captured, it will explode if they try to dissemble and study it."

Nick Riley's anger fired at the picture the crafty Councillor had drawn. A picture of his own race, the descendants of Americans of his own day, forced to dwell under earth's surface, while the foreign conquering Airlords dominated the surface with their radio-powered planes.

In him rose a sudden fierce determination to fight against the rule of these arrogant Airlords, to help the Groundlings, his own race, win their freedom. Then he suddenly remembered he himself was now chief of the hated Airlords!

"Why in the world was my brain

put into the body of Jan Strang, your First Airlord?" he cried.

"It was necessary to my plans," shrugged Garr Allan. "Today a Groundling girl slave here tried to assassinate Jan Strang. The bolt of her electric pistol pierced his skull, destroyed his brain. Jan Strang was dead—that meant that Stirb Ikim, the Second Airlord, would inherit the rulership and I would lose my powerful position as Chief Councillor.

"I determined somehow to revive Jan Strang to life, to save my own position. His body was undamaged—only his brain was destroyed. I remembered the living brain in serum, in our scientific museum here. So I had my physicians, under oath of secrecy, bring that brain here and put it into Jan Strang's skull. Our medical science is so advanced that the operation was easy, and our therapeutic knowledge is such that the incisions could be healed over in an hour. No one will know you are not really Jan Strang, if you do as I say, and I will remain in power."

Chapter III

A False Airlord

Before Nick Riley could answer, a liveried servant ran hastily into the room.

"Master!" he cried to Garr Allan. "Stirb Ikim and the nobles are coming here! He has told them Jan Strang is dead, and that he is now the rightful First Airlord."

The little Councillor's cunning face paled.

"Now you must play the part of Jan Strang well!" he told Nick tensely. "For if they discover this imposture, they will kill both of us."

The doors of the room flew open as he spoke. A crowd of dark-faced men in black uniforms burst in.

At their head was a thin-lipped, hatchet-faced man with agate eyes who was obviously Stirb Ikim.

"I say that Jan Strang was killed by that Groundling girl!" Stirb Ikim was exclaiming as they entered. "You shall see his body yourselves, and then according to law you must acclaim me First Airlord."

"Jan Strang is *not* dead!" shrilled Garr Allan to the entering throng. "Look, and see for yourselves!"

A confused cry of astonishment went up from the nobles as they saw Riley standing, facing them.

"It is true—Jan Strang still lives!"

Riley saw Stirb Ikim's jaw drop in sheer surprise. Then the Second Airlord's face hardened.

"This is some impostor!" he cried to the nobles. "Can a dead man return to life? I tell you, I *saw* Jan Strang fall dead when the Groundling girl fired at him."

Doubt came upon the nobles' faces as they heard. Garr Allan whispered frantically to Riley.

"Assert yourself now or we are both lost!" whispered the little Councillor in an agony of fear.

Nick Riley sensed his peril. And he knew he had no choice but to carry on for the time being in the part into which he had been thrust. He had to *be* Jan Strang, First Airlord, or he wouldn't live long. And he was determined now to live—for a purpose.

That purpose was to smash the tyranny of these foreign Airlords over his own race! Somehow, he swore inwardly, he was going to do that. But he wouldn't live long enough to do that or anything else if he didn't play his part well now.

A tingling excitement leaped through his blood.

"Nobles of Amer, have you lost your wits that you do not know Jan Strang when you see him?" he shouted loudly. "I was wounded by that girl assassin—but do I look dead?"

Stirb Ikim reached toward the stubby pistol at his belt. Riley saw it, and rasped to the man:

"Draw that gun, Stirb Ikim, and I'll take it from you and break your neck with my bare hands."

Stirb Ikim fearfully let his hand fall from his belt. And a great shout went up from the nobles.

"It is Jan Strang who speaks, indeed! Hail the First Airlord!"

Riley grinned inwardly at the thunderous cheer. It seemed that by luck he had acted just as the real Jan Strang would have done, and it had convinced them.

Stirb Ikim bowed with poorly assumed respect, hate still throbbing in his thin face.

"I beg your pardon, highness," he muttered. "I honestly thought you dead, or I would not have dared—"

"Save your excuses," Riley told him contemptuously. Flushing darkly, Stirb Ikim backed away.

Garr Allan whispered tensely.

"Dismiss them now—you have done well so far, but you may make a slip any moment."

Riley waved a big arm toward the doors. "You may go, nobles of Amer," he told them. "And next time see that you do not credit Stirb Ikim's assertions too quickly."

A roar of laughter went up at that. And Riley saw that Stirb Ikim's agate eyes were throbbing with fury as the Second Airlord backed out with the others.

Left alone with Garr Allan, he

felt a little shaky, and drew a long breath of relief.

"By Heaven," he muttered. "We put it over—but it was a bad ten minutes."

"Stirb Ikim still suspects," said Garr Allan, his crafty face thoughtful. "He was present when that Groundling slave-girl Nirla attempted to kill you."

"Why the devil did the girl try to kill me, or rather, Jan Strang?"

The Councillor shrugged. "She hates you bitterly, like all the Groundlings in Amer. They consider Jan Strang their most implacable enemy, whom all would love to kill."

"Where's the girl now?"

"In the dungeons underneath the palace," Garr Allan told him. "She will be executed in the morning."

Then the little Chief Councillor looked at Riley, his cunning eyes narrowed thoughtfully.

"You are Jan Strang now," he said. "You, a man or rather a brain from the past, are ruler of all Amer. You owe me gratitude for putting you into this powerful position. And I shall expect you to be grateful."

"I shall expect you," Garr Allan continued, "to leave the actual rule of Amer in my hands. So long as you do that, I will help you maintain your position."

"We'll talk it over again," Riley told him. "Right now, I'm feeling plenty shaky and tired."

"It is no wonder," smiled the little man. "You have come across three centuries. I shall leave you now to rest, and later tonight will return to our talk."

Riley watched the foxy little man leave, and a frown gathered on his face. If there was one thing he did not feel, it was any gratitude or obligation toward Garr Allan. The

Councillor had only put his brain into Jan Strang's body to save his own position, and further his own scheming ends.

And now he Nick Riley, was installed in this palace as chief of the Airlords of Amer, chief of the tyrants who had forced the American race into the earth. No wonder the Groundlings hated him so bitterly! No wonder that girl slave of their race had done her best to kill him!

His jaw clamped with sudden decision. He was going to see that girl. For she, who was a Groundling herself, could tell him better than anyone else how he could best aid the Groundlings to overthrow the Airlords.

He strode out of the silvery room, through luxurious chambers in which a rosy glow of artificial light was softly growing, as night fell outside. He came out into a broad corridor where a guard sprang to attention.

"Your orders, highness?" he inquired.

"Escort me to the dungeons in which the girl who tried to kill me is confined," he ordered curtly.

The guard's dark face expressed understanding. "Yes, highness—shall I call your torturers, also?"

"No!" Riley flared, shocked to fury by the dark possibilities implied by the question. "Go ahead!"

Hastily, the guard led the way down the corridor. Riley strode after him, down little-used back stairways and halls, all glowing with rosy light, down into gloomy passages curved out of the living rock beneath the palace.

The guard stopped before the solid metal door of one of the rock-hewn rooms of this somber labyrinth.

"Here is the girl's cell, highness."

"Get me the key."

The soldier was back with it in a moment.

"Now return to your post," he rapped. The guard stared wonderingly, but obeyed.

Riley unlocked the door, and stepped into a rock cell softly lit by a single rosy bulb.

A girl who had been sitting on a metal bunk sprang erect as he entered. She shrank back, her face dead white, as she recognized him.

She was young and slim, the youthful beauty of her white limbs revealed by her short white silken robe. Her black hair fell in a soft, wavy mass to her shoulders, her dark eyes were wide with incredulous amazement.

"Jan Strang!" she whispered. "But I killed you—I saw you fall dead—"

Then the incredulous surprise on her face was succeeded by bitter disappointment and hate.

"So you were only wounded, tyrant! I was awaiting execution happily, thinking I had killed you."

Nirla's dark eyes were blazing, her breast heaving with emotion as she glared at him.

"If only I had killed you!" she repeated throbbingly. "You, the chief of the Airlords who live in the sunlight while we Groundlings hide beneath the earth like animals! It was my dearest wish, from the time I was captured and brought to this palace as a slave, to kill Jan Strang. And I've failed!"

"Nirla, you *did* kill Jan Strang today," Riley told her emphatically. "I am not he—though my brain now inhabits his body."

"Do you expect me to believe that, tyrant?" Nirla exclaimed with bitter laughter.

"It's true!" Riley said desperately. Rapidly, he told her of his incredible awakening. "So you see, I'm not

Jan Strang. I'm Nick Riley, an American of three centuries ago."

Doubt came into Nirla's frowning face.

"It's true," she whispered, "that I have heard of a living brain preserved in serum for generations in the museum. But why should Garr Allan put your brain in Jan Strang's body?"

"I've told you that Garr Allan was only seeking to preserve his own position," Riley said. With sudden inspiration, he added, "Look at the back of my skull. There ought to be a new scar there, if my story is true."

He turned his head. He heard Nirla bend close, felt her warm breath on his neck, then heard her gasp.

"There is a scar!" she exclaimed. "Then it is true!"

Her eyes were suddenly shining at him. "You are one of the great race who were our ancestors, the Americans who were free men. You are not Jan Strang!"

"No, I'm not Jan Strang," Riley said rapidly. "I mean to smash the rule of these Airlords over your people, my people. And I've thought of a way in which their rule could be overthrown this very night—"

A cold, hard, triumphant voice from the door of the cell interrupted him.

"So you are an imposter, as I thought!" that voice exclaimed exultantly.

Riley spun around. The door had stealthily opened—and Stirb Ikim stood in its opening.

Chapter IV

Nirla's Mission

There was triumph in Stirb Ikim's thin-lipped face, baleful exultation

in his agate eyes as he confronted Riley. He held an electric pistol in his hand.

"So this is the explanation of Jan Strang's strange revival from death!" he gloated. "I knew there was some imposture—that is why I trailed you when you came down here, and listened at the door. And well have I done, for now you and Garr Allan shall die for your deception, and I shall be rightful First Airlord of Amer."

"Not if I can help it," Riley rasped, and sprang for Stirb Ikim as he spoke.

The Second Airlord, engrossed in his gloating triumph, had not expected that wildcat spring. He fired his weapon—but an instant too late. The crackling blue bolt of electrical force from the weapon grazed Riley's head.

And then Stirb Ikim was borne to the floor by Riley's rush. The American wrested the pistol from his hand. And before Stirb Ikim could open his mouth to yell, Riley had thrust the unfamiliar weapon into the man's ribs.

"One peep out of you, and you'll die!" he rasped. "Get your hands up."

Stirb Ikim's hatchet face was raging as he raised his hands.

"You and Garr Allan will not get away with this imposture for long!" he said furiously.

Nirla clutched Riley's arm. "You were saying you had thought of a way by which the Airlord's rule could be overthrown this very night. What is that way?"

"How far are the nearest subterranean Groundling cities from this city N'Yor?" he asked her rapidly.

"Less than fifty miles. Why?"

"I want you to carry word to your

people in them to come out with all their forces, and march toward N'Yor and attack here at midnight," he told her.

Nirla shook her head hopelessly. They would not dare do that. The planes of the Airlords would swoop down on them before they reached N'Yor, and slaughter them 'all."

"But suppose none the Airlords' planes can fly tonight? Suppose that Power Tower stops broadcasting power, and all the planes are grounded. Then would your people dare attack N'Yor?"

"They would, yes!" Nirla cried, dark eyes lighting. "Do you mean that you could stop the tower from broadcasting power tonight?"

"I think I can," Riley told her. "As Jan Strang, First Airlord, I can get inside that tower. Once inside, I'll stop the power-broadcast, or die trying."

"You traitor!" cried Stirb Ikim. "Plotting the overthrow of your own people—"

"They're not *my* people," Riley snapped. "I was thrust into the body of Jan Strang without being consulted. My people are the Groundlings, rightful owners of this country."

But Nirla's excitement suddenly vanished, a baffled, frustrated look came into her soft face.

"It's impossible—how can I get out of N'Yor to my people?" she said. "I'd surely be discovered before I escaped this city."

"No, you're going in a plane," Riley told her. The inspiration had come to him the moment before.

She shook her head. "I cannot fly one. No Groundling can."

"Stirb Ikim can—and he's going to fly you to your people, Nirla," Riley rasped. "He'll do it or die—you can sit behind him with this pistol.

all the way."

"I won't do it!" cried the Second Airlord. "I won't help you bring about the overthrow of my people."

"You'll do it, or die right here and now!" Riley told him, shoving the weapon into his ribs.

Stirb Ikim paled. At heart, he was a coward. And he proved it now.

"Even if I did do it," he said sullenly, "the Groundlings would kill me when they got hold of me."

"Nirla will make them spare your life," Riley promised. "It's your only chance to live!"

Stirb Ikim's eyes rolled helplessly, hate and fear contending in them. Riley's trigger finger tightened. The Second Airlord blanched.

"I'll—I'll do it," he gulped.

"I thought you would," Riley said grimly. "Now lead the way out of here to the nearest plane. Remember, if you try any tricks or if we're challenged, you'll get yours."

Ten minutes later, his gun still pressed into Stirb Ikim's back, they emerged from the great palace into the starlit lawns and gardens around it.

All around them, in the middle distance, towered the great pyramids of N'Yor, patterns of blinking lights, with many lighted planes coming and going above them. A mile away soared the shining white spire of the Power Tower.

Stirb Ikim led across the palace gardens to a row of sleek-winged silver planes. He paused by one of them.

"This is my own plane," he muttered.

"Get in," Riley grated.

And as Stirb Ikim handed Nirla the pistol.

"Keep this gun against his back, Nirla, if he tries any tricks, don't hesitate to kill him."

"I will," she promised. "And I will have the Groundlings gather every man and march to attack N'Yor at midnight, as you ask. But—"

There was an agonizing doubt in her clear, dark eyes upraised to his, a terrible fear.

"—but if you should fail," she told him, "if the power should not be turned off, then the planes of the Airlords will take the air to slaughter my people."

"Don't worry, the power *will* be turned off by midnight," Riley promised emphatically. "I know the fate of the Groundlings depends on it, and I won't fail."

Nirla impulsively raised her lips and pressed them warmly against his. Then she entered the cabin of the silver plane and closed the door.

Riley glimpsed her in there, holding her gun against Stirb Ikim's back, giving him orders. The electric motors of the plane whirled, it rose into the starlight, circled once, and then drove westward at high speed.

Chapter V

The Power Tower

Riley watched, his heart thudding. Nirla should reach the subterranean Groundling cities and get their forces on the march, in an hour. And if he fulfilled his part, this night would see the end of the Airlords' rule! He ought to be starting now for the Power Tower—

"Jan Strang, what are you doing out here?" cried an anxious voice.

He turned startledly. Garr Allan, the little Councillor, was hastily approaching, followed by servants.

"What are you doing here?" Garr Allan repeated. "Don't you know that

Stirb Ikim might try to murder you?"

"I just came out to look around," Riley answered lamely.

"You must return into the palace at once—it's not safe for you out here," Garr Allan declared.

Riley swore inwardly. He couldn't start for the Power Tower now—Garr Allan would suspect his motive. And he couldn't stun the Councillor, with his servants watching. He had to go with him, and get rid of him as soon as he could.

He went with Garr Allan back to his own spacious, softly-lit apartments. There the little Councillor broached what was on his mind.

"We must find some way to get rid of Stirb Ikim!" Garr Allan declared, his cunning face determined. "He suspects you are an impostor, and he is a danger to us."

Riley wasn't listening. His eyes were on a clock. Midnight was only a few hours away. He racked his brain for some way of getting away from Garr Allan, to the Power Tower.

"Why aren't you listening?" Garr Allan demanded, eyes narrowed. "What has happened to you?"

Riley was spared an answer. A soldier hastily entered the room and saluted.

"It has just been discovered that the Groundling girl, Nirla, who tried to kill you has escaped!" he told Riley. "Her cell was found empty."

"Well, send out an alarm for her capture," Riley said with assumed indifference. "Why bother me about it?"

The soldier hesitated. "But since you went down to see her tonight, highness, I thought perhaps—"

"Get out and don't annoy me further about the matter until you've captured the girl!"

Hastily, the man withdrew. But a suspicious expression had come into Garr Allan's crafty eyes.

"You went down to see that girl?" he asked, frowning. "Why?"

"I just wanted to see what these Groundlings look like," Riley lied.

Garr Allan's face grew darker with suspicion.

"I don't believe you—I think you helped the girl escape," he snapped. "And if you did that—"

Sudden understanding and fear crossed his face. "If you did that, you're plotting something with the Groundlings against us Airlords! I might have known that you, a barbarian from the past, would hate us. But I'll not let you live to conspire any longer against us—I'll expose you as the impostor you are!"

And Garr Allan opened his mouth to yell for the guards. But Riley sprang, his hand clamping over the Councillor's mouth and stifling his cry.

"Remember, Garr Allan," Riley rasped, "if you expose me now, you expose your own trickery. You'll be condemned for that, yourself."

But Garr Allan continued to struggle frenziedly to open his mouth. Riley understood then that the little Councillor, trickster and schemer though he might be, would risk his own life to stop the conspiracy against his race.

Hastily, therefore, he bound and gagged the little man with strips torn from the hangings. He looked at the clock. Midnight was nearer! No time to lose now! He searched the rooms until he found a rack of electric pistols, stuck one in his belt, and slid out a window into the dark gardens.

In fifteen minutes, he walked boldly up to the lighted entrance of the

looming Power Tower. A closed, heavy metal door in the silver wall had muzzles of great electric guns projecting from around it, and a full company of soldiers on guard outside it.

"Stand back!" warned their officer as Riley approached. "You should know that no one is permitted to approach the Power Tower."

"Not even Jan Strang?" Riley asked loudly.

"The First Airlord!" exclaimed the officer. He bowed low. "Pardon, highness."

"You were but doing your duty," Riley approved gruffly. "Have the door opened."

The officer hastened to a button in the wall, pressed it in a complicated signal. The huge slab of the metal door swung slowly inward, as great bolts were withdrawn.

Riley strode into a vast, brilliantly-lighted hall where colossal, unfamiliar generators droned. Two gray-clad technicians came toward him, as another closed the door.

"What orders, highness?" they asked.

"Shut off the broadcast of all power at once," Riley clipped.

They stared at him as though unable to believe their ears. Then they broke into a babble of protest.

"But highness, we can't do that! It would mean that all planes in eastern Amer, all the patrol fliers on which we depend for safety, would have to come to earth. Such an order has never been given before!"

"I'm giving it now," Riley rasped. "I am First Airlord, am I not? I order you to obey."

Looking stunned, the chief technician bowed jerkily.

"Very well, highness," he stammered. "I will go at once to the switch room and give the order."

"I'll go with you," Riley said tightly.

He followed the chief technician down the vast hall toward a copper door. But at that moment the sound of a shrill, screaming voice came from outside the tower.

"Open to me—Garr Allan! Treachery is going on inside!"

Chapter VI

Besieged

One of the technicians started toward the heavy door, to withdraw the bolts.

"Don't open it!" Riley rapped.

The technicians hesitated. Inwardly, Riley was cursing the chance that had permitted Garr Allan to escape his bonds. He should have killed the little Councillor!

"Open, I say!" Garr Allan screamed outside. "The man in there with you is not Jan Strang—he is an impostor who is about to betray us to the Groundlings!"

The chief technician, staring at Riley, went white. He tugged at his pistol.

"So *that's* why you ordered the power shut off!" he cried, his weapon flashing up.

Riley had already jerked out his own weapon. He aimed the unfamiliar weapon as he would have done an ordinary pistol, and pulled the trigger as the other man cried out.

A bolt of crackling blue force shot from his pistol and hit the chief technician. He fell, but the other two gray-clad men were drawing their guns. The bolt from one of them scorched past Riley's arm as he shot swiftly. Both men tumbled in dead heaps. But his pistol's electric charge was exhausted.

There was a thunderous din at

the outer door—Garr Allan and the guards outside were battering to break it in. He looked wildly around the vast hall. There were no other technicians in sight—apparently only a handful of men were needed to keep the jealously guarded Power Tower functioning.

Riley ran toward the copper door of the switch room. It opened as he approached—the technician in charge of it peered out startledly at the dead men in the hall.

"What has happened, highness?" the man cried as he recognized Jan Strang's figure. "Who is at the door?"

"They are rebels against my rule," Riley told him, thinking swiftly. "I had to kill these men."

He pushed the technician back into the switch room. It was a copper chamber whose curving walls bore a bewildering number of gigantic switch panels. These were the controls of the mighty flood of power that was broadcast from the tower to every plane of the Airlords in eastern Amer.

Riley shut and barred the copper door once he was inside, and then quickly ordered the bewildered technician:

"Shut off the power broadcast, at once!"

"But highness—," the man objected.

"It is necessary, to break the revolt against my rule!"

Hesitatingly, the man went to the panels. He hastily flipped giant switches and relays, one after another.

Riley heard the thunder at the outer door of the tower grow louder. They were using battering rams now.

"The power broadcast is all off—every plane in eastern Amer is

now grounded!" the technician hurried up to report. "What now?"

"Now, we wait." He glanced at a clock—still nearly an hour to midnight!

The Groundling forces, he knew, must still be miles from N'Yor, even if Nirla had succeeded in getting through to her people. And if she hadn't—

The minutes fled by, and the battering at the outer door of the tower had become a deafening din. The clock showed a quarter hour to midnight when the outer door went down with a great clang.

Riley heard the besieging guards rush into the tower. In a moment they were battering against the copper door of the switchroom, Garr Allan urging them on.

"Highness—" faltered the technician.

"Turn on the power again, you inside!" shrieked Garr Allan from outside the copper door. "It is not Jan Strang in there with you but an impostor, a traitor!"

The technician heard, his face went livid. He sprang back toward the switch panels.

Riley jumped after him, brought his gun butt down on the man's head. He sank in his tracks.

The copper door was now beginning to bend inward. The clangor of battering was thunderous in the switch room. They would be inside in a few moments.

Riley looked around the room. If he could just wreck these switches somehow to keep the power off a little longer. But he had no tools, nothing but his bare hands.

The copper door bent further inward. He felt despair bitter in his soul. He had failed Nirla, had failed the Groundlings, the descendants of his own race. There

was nothing left for him but to die fighting.

Bare hands against the thundering crowd who would rush in in another minute! He tossed his useless gun away, clenched his fists and stood with legs wide apart inside the sagging door, his face flaming the defiance he felt. He'd show them how a man of three centuries before could die!

A wild scream penetrated through the clangorous din outside the door.

"The Groundlings are attacking N'Yor! Their hordes are streaming into the city!"

The attack on the door was interrupted the next minute by a sudden crash of battle out there in the great hall of the Power Tower, a wild uproar of yelling voices.

Recklessly, Riley unbarred and opened the sagging copper door. The great hall of the tower was being invaded by a torrent of men, pale-faced, white-clad men who had electric guns, and even swords and spears for weapons, wild-eyed men who were with utter ferocity attacking the black-clad Airlords.

The Groundlings! Riley yelled with exultation. They had come at last, their attack had smashed into N'Yor, while the stopping of the power broadcast had grounded the planes of the airlords. The descendants of American freemen were taking long-delayed vengeance on the conquerors of their land!

Groundlingwarriorswhoperceived Riley's black uniform ran toward him with weapons raised in menace.

"Stop!" cried a silvery, urgent voice.

Nirla came flying through the Groundling fighting-men, flung her arms around Riley.

"It is the man who saved us—the American from the past who wears

Jan Strang's body!" she cried to them.

And she clung to him, sobbing, "You did it! You shut the power off, and my people are sweeping all in N'Yor before them."

The Groundlings had killed every Airlord in the tower. Riley and Nirla hurried out with the warriors into the night.

In the darkness, great N'Yor had become a hell of battle and death. Thousands of Groundlings were streaming through the city, hunting down the Airlords who fled in panic or turned vainly to fight. Blue electric flashes starred the darkness.

But the Airlords were already overwhelmed. Without the myriad planes on which they had always counted for safety, they could not oppose the hordes of vengeance-made Groundlings who were taking toll for two centuries of oppression. Already

all organized resistance of the Airlords was shattered.

A tremendous throng of Groundling fighters gathered around Riley and Nirla, and shouted themselves hoarse.

"We've won!" he cried to the girl. "Now we hold power over all eastern Amer. And we can use all these planes now, powered by this tower, to sweep the Airlords out of the west."

A giant, bearded Groundling soldier waved his bloody sword aloft and shouted in a bull voice.

"For years," he yelled, "my dearest wish was to kill Jan Strang. But now that he, or the man in his body, has won our land for us again, I say—hail Jan Strang, President of Amer!" There was a roar of approval from a thousand liberated voices.

The End

Change Eternal

From a proton to a planet,
From electrons to a star,
Moves the universal essence,
Going fast and going far;
Forming atoms, solar systems,
Molecules and Milky Ways;
Drenching comets, suns, and clusters
With a rain of cosmic rays.

From a colloid to a primate,
From amoeba to a brain,
Slowly climb the vital essence
Through conic sun and rain.

Out of dark and dreams it wakens,
Rises out of hate and strife,
Curbing fear with fact and reason—
Dying often into life.

Back to protons from a planet,
Back to atoms from a brain,
Swings the energetic essence,
Canceling its loss and gain;
Ever restless, ever ranging,
From its monads to its stars;
Ever changing, yet eternal,
Through its countless avatars.
By Leland S. Copeland.

THE REVOLT ON THE TENTH WORLD EDMOND HAMILTON

Illustrated by Julian S. Krupa

The Tenth World was not the planet Jim Crane wanted to hail from—but public opinion had condemned him to a lifetime on this mythical world of shame.

SAY that again!"

Jimmy Crane's voice was hoarse with passion, his worn, space-bronzed young face quivering, his lean figure crouched rigid.

The softly lighted Café of Nine Worlds in the Martian equatorial city of Gyros was stricken to silence, all the motley interplanetary throng in it watching the young Earthman.

Crane stood against the bar where he had been drinking Saturnian fungus-liquor a moment before. He had swung about to face the chunky Venusian space captain who had just spoken.

"I'll say it again!" declared the Venusian loudly, eying Crane in bitter contempt. "I won't drink at the same bar with a man responsible for the death of six hundred space passengers—a pilot who wrecked his ship and killed all those people, but saved himself. I'm damned if I'll rub shoulders with a murderer!"

"Why, you—" Crane choked, dived at the Venusian, and got his

hands around the captain's throat.

Next moment he was pulled off. The massive Martian who was proprietor of the Café of Nine Worlds had intervened.

"No fighting in here," rasped the Martian. "You'll keep peace or leave."

"I'm leaving, anyway," sneered the Venusian captain. "The air in here is too bad for me!"

Crane, quivering with impotent anger, saw the Venusian stalk out. He saw the scorn and condemnation in the eyes of all the spacemen in the place—bitter contempt they all felt for him.

He turned back around to the bar, shoved his glass forward.

"Another," he said thickly.

Other spacemen along the bar had elbowed away from him. All except two men—a big, hulking Jovian and a wizened Mercurian.

"So you're Crane, the pilot that wrecked the Vulcan?" said the Mercurian to him curiously.

"What the hell is it to you?" Crane asked roughly.

Copyright 1940 by Ziff-Davis Pub. Co.



The Mercurian grinned. "No offense. Kad and I don't give a damn what you did—seeing as how we're Tenth-Worlders ourselves."

It was a significant phrase. There were but nine planets—so outlaws and criminals who could call no world their home were called Tenth-Worlders. Only Tenth-Worlders would associate with Crane now!

Crane, moodily staring into the chromaglass mirror behind the bar, was really tensely watching a Saturnian across the room, a very fat, gray-skinned individual with a moon-like face. Now Crane stiffened as he saw the obese Saturnian get up and approach the three at the bar. Maybe, Crane thought tensely, what he had hoped for was at hand.

"Greetings, gentlemen," the fat Saturnian said to them in a purring voice, his small, shrewd eyes beaming. "I am Ul Kuil."

The Jovian beside Crane stared at the fat gray man with all the age-old enmity that lies between Jupiter and Saturn.

"So what?" sneered the Jovian.

"You," said Ul Kuil softly to the Jovian, "are Kad Karo, hunted by the Jovian police for murder and space piracy."

The hulking Jovian stiffened, and his hand went to the atom-gun at his hip.

"You're a police spy?" he grated.

Ul Kuil shook his head placidly. "I assure you I am not." He turned his shrewd eyes on the little Mercurian. "You are Nigor Quae, under sentence for piloting a drug-smuggling ship."

The Mercurian swore viciously. He and the Jovian were like two beasts ready to spring, as Ul Kuil turned toward Crane.

"And you," purred the Saturnian, "are James Crane, first officer and

pilot of the liner *Vulcan*—until your pilot's license was canceled for negligence when you ran the liner into a meteor-swarm and wrecked it with the loss of most of its passengers. You're a spaceman who can't ever pilot again."

Crane had been tense ever since the Saturnian's approach. But he kept his voice harsh and level as he answered.

"Never mind the ancient history!" he snarled. "What are you rocketing in here for if you're not a police agent?"

"Yes, what do you want?" hissed the Mercurian.

Ul Kuil smiled blandly across his gray moon of a face.

"Gentlemen, I have come to offer you honest employment."

"Ho!" guffawed the loutish Jovian. "That's good—offering work to two Tenth-Worlders and a de-licensed space pilot!"

"You've all three been spacemen," Ul Kuil continued imperturbably, "and my employer needs good pilots. It won't matter that you don't have licenses. It's the men we want."

Crane frowned as though he didn't understand, and said skeptically,

"You really are offering me a pilot job? Where?"

"On Umbriel, second moon of Uranus," Ul Kuil replied. "Jan Vliet, my Earthman employer, maintains a mining base on that wild little moon and needs pilots to transport his mineral shipments to other planets."

The little Mercurian stiffened. "So *that's* your job!" he hissed. "Flying umbron for that black devil Jan Vliet. No, thanks—you'll never get me to pilot in that trade!"

"Nor me either," swore the Jovian, gulping his drink and setting his

glass down with a crash. "Not while I'm sane."

"The police will get you sooner or later and you'll go to prison for life," Ul Kuil declared. "You'd be safe out at Umbriel—you wouldn't be required to fly to worlds where you're wanted."

"I'll take prison any day before I'd go to Umbriel and join Vliet's pilots!" swore the Jovian. "Flying umbron between worlds is as safe as kicking a Venusian swamp tiger in the teeth."

Crane frowned. "Why? What is this umbron stuff, anyway?"

"It's simply a valuable mineral—" fat Ul Kuil began.

But the Jovian interrupted. "It's pure poison, that's what it is," he told Crane vehemently. "It's an isotope of radium, so demoniacally radioactive that no matter how you insulate it, its radiations affect a space ship's instruments and drive them haywire. With a load of umbron in your ship, you can't rely a minute on your space sextants, meteorometers or other instruments. You fly blind in space!

"That's why the law forbids umbron to be shipped on ordinary freighters or liners. That's why Jan Vliet has to have his own pilots and small cruisers to fly the stuff to other worlds.

"And that's not all of it," the Jovian continued heatedly. "That cursed moon Umbriel is a crazy jungle of the damndest planetary natives ever heard of—the Greenies, fierce, half-human devils with ninety-odd weird ways of killing a man. Even if you scrape through the umbron trips, the Greenies there are likely to get you."

"Come, it's not that bad," protested Ul Kuil. "Vliet has got around the Greenies—even uses them for

laborers. And he pays his space pilots well."

"He doesn't *have* to pay many of 'em—they never live to collect!" sneered the Jovian. "Which suits Black Jan Vliet fine—he adds it to the millions he's got cached somewhere on that devil moon. Millions he wrung out of the blood of dead pilots!"

And the Jovian turned savagely. "Come on, Nigor—we'll keep rocketing the Tenth-World trail before we ever join up with Vliet's legion of damned souls!"

The hulking Jovian and the wizened Mercurian strode out of the busy Café. Ul Kuil looked after them sadly.

"Too bad," murmured the fat Saturnian. "They'll never get off Mars—the police will get them sure. They'd have done better to accept my offer."

Then Ul Kuil looked at Crane with his shrewd little eyes.

"What about you, Crane? You're no Tenth-Worlder—but as a de-licensed pilot, you're even worse off. Space-flying is the only thing you know. You've trained all your life for it, and now you can't ever rocket again.

"That's worse than death to a pilot like you, isn't it? Never to blast off again? But you never can—unless you join Vliet's outfit. He's the only one who would ever hire you now."

Crane knew that he mustn't seem too eager to take the job. He smiled sourly at the fat Saturnian.

"Got it all figured out, eh? What about this umbron—is it really as dangerous to transport as those two claimed?"

"No, of course not," purred Ul Kuil.

"But if the stuff's so valuable that

your boss has really made millions out of it, can't you find a better way to ship it?" Crane demanded.

He saw Ul Kuil's small eyes narrow, and Crane went cold inside. Did the Saturnian suspect what he was getting at?

"The talk of Vliet's millions is just idle rumor," Ul Kuil declared. "He does make a fair profit from the umbron, and he pays his pilots well. What about it, Crane?"

Crane shrugged. "I'll sign on. You know damned well I've got to, if I want to fly space again." He made his voice bitter.

"Good!" approved Ul Kuil. "We'll leave at once. The cruiser that brought me here to Mars is out at the space port. Got any duffle? No? Then come on along."

The space port was just outside the old city, under the equatorial stars and the forked light of the two hurtling moons. The cold air was nipping and spinning little sand-devils whisked like vagrant ghosts of Mars between the docks and rows of parked ships.

Ul Kuil waddled toward a small, battered cruiser of stubby lines that lay in the darkness by the edge of the space port.

"You'll meet Whitey Kane, one of our other pilots, who brought me to Mars for recruits and supplies," Ul Kuil wheezed as he waddled along. "He's an Earthman too—old-time veteran pilot."

"This is a plenty old-time ship you've got," Crane commented disparagingly as they approached the antiquated cruiser. "If it's a sample of Vliet's umbron cruisers, it'll be some fun rocketing for him."

Ul Kuil glanced slyly sideward at him.

"Well, we can't afford to buy expensive, brand-new ships—"

"Not when you lose so many ships and pilots, eh?" Crane retorted.

When they entered the lighted cabin of the craft, which was crowded with piled sacks and metal cases, a wiry old Earthman got up, stretching and yawning. His sparse hair was pure white, his face bronzed and seamed like leather by long exposure in space to unsoftened radiation.

"This is Crane, new pilot," Ul Kuil told the old veteran. "Only man I could get. The other two I was after refused to join up."

"Which showed their good sense," declared old Whitey Kane with a cackling chuckle. He eyes Crane. "You a Tenth-Worlder?"

"None of your business," Crane snapped, and Whitey chuckled again.

"No offense, lad. Come and help me start up."

Crane went forward to the control cubby with the old man. Whitey started the cyclotrons droning, and then turned and with his face now deadly serious, whispered shrilly,

"Lad, listen to me—take my advice and jump ship before we start. A young fellow like you don't want to go out to that hell's moon."

"If it's so bad, why are you there?" Crane asked bluntly.

Whitey shrugged bony shoulders. "Only place I could keep rocketing—I was de-licensed for age, two years ago. But you—"

"I'm in the same fix, de-licensed," Crane said bitterly. "Go ahead. I know what I'm getting into."

"No, you don't, lad," muttered the old pilot. "You don't know Jan Vliet and you don't know the devil's brew of trouble that's boiling up out on that moon. But it's your funeral, after all."

Crane made no answer. The ship

lurched skyward with a roar of tubes, the whole fabric of the old cruiser shuddering and creaking to impact as its flaming exhaust hurled it away.

Crane looked up through the brilliant stars at the far, bright green speck of Uranus, and his heart beat faster.

"Umbriel!" he thought. "I'm on my way, at last!"

Chapter II

Legion of the Damned

Screaming protest in every stanchion, its aged walls shuddering and threatening to buckle under the thunderous braking blasts, the little cruiser decelerated. Uranus was a colossal green sphere bulking across half the firmament overhead. Beneath, the yellow-green sphere of the little moon Umbriel was expanding.

Crane held the rocket-throttles of the craft, and was constantly cutting speed as they dropped toward the moon. In the ten days of their flight out here from Mars, Crane had stood trick at the controls and had learned just how much power he dared to use without tearing the age-weakened ship apart.

"She'll stand just a mite more brake-blast, lad," calmly shrilled old Whitey Kane from his seat beside Crane. He watched approvingly as Crane expertly edged the throttles. "That's it, lad—you got a nice touch."

"Took me ten years to get it, and now it's no good except to nurse along an old crate like this on a run nobody else would take," Crane commented bitterly.

Umbriel was now broadening out below. Crane saw the small moon, only five hundred miles in

diameter, as a curving convexity blanketed by thick, seething, steaming yellow-green jungle. It looked ugly and repellent in the pale wash of sunlight.

Thin air whistled outside as the cruiser rocketed down obliquely around the moon. A big scar on the ocher jungle showed ahead. It rushed closer, revealed itself as a small, compact clearing hacked out of the vegetation, with chromaloy buildings on it.

"There she is," old Whitey declared. "Only 'civilized' spot on Umbriel."

Crane detected the irony in the old pilot's words. Ul Kuil came waddling in and strapped himself into a chair.

"You'll land at the end of that row of ships," ordered the fat Saturnian.

Crane brought the old cruiser smoothly down to the line of a half-dozen parked ships. Rocket jets churned up the ocher soil furiously, then were cut out as the ship landed with a sharp jar.

"Neutronium slippers, lad," reminded old Whitey as Crane unstrapped himself. "Not much gravity to this moon, you know."

Crane nodded and slipped on the over-slippers that contained a thin plate of super-heavy neutronium to make his weight normal. Then, shuffling a little awkwardly, he emerged. Ul Kuil was waddling toward the chromaloy buildings, and they followed.

The sunlight was thin and weak, but the air was very warm from the core of radioactive matter that lay at the heart of this moon. The ocher soil crunched under their feet. In the brassy sky, the immense, dull-green sphere of Uranus bulged like an incredible moon.

Crane looked around curiously. The whole clearing was surrounded by a strong steel stockade. Beyond its outer side stretched the yellowish jungle—a *crawling* jungle, many of whose vines and snake-stemmed shrubs had the queer rootlessness and powers of locomotion characteristic of Uranian flora. The larger trees, black trunks bearing masses of flat fronds, were rooted.

The north half of the clearing was scarred by open rock workings. In them, laboring with picks and chisels, were some fifty semi-human, yellow-green creatures. They looked like hybrid travesties of mankind, bipeds whose limbs and arms seemed quite boneless, and whose conical heads and pupil-less eyes were wholly alien.

"Greenies," said Whitey carelessly. "Vliet uses 'em to dig out the umbron."

"I thought the creatures were fierce and hostile to all visitors," Crane declared.

Whitey nodded. "They're fierce enough—make no mistake on that. May not have much brains, but they've sure thought up some sweet ways of killing. But Vliet got around 'em by offering high pay, and though we don't trust 'em much, they haven't tried any tricks on us—lately."

"Vliet *pays* those creatures?" Crane repeated incredulously. "What the devil would they do with money?"

Whitey cackled, "Vliet don't pay 'em money. He pays 'em in broken glass. You see, they've got an idol back there in the jungle they worship—a big fallen meteorite that happens to look something like a head—and they labor here in regular tricks just to get beautiful pieces of broken glass to offer to their crazy god."

They had passed the parked ships

and were abreast of a low chromaloy building in front of which lounged several men in soiled, slovenly space jackets. Crane noticed a tall Martian, a squat Jovian, a Venusian and others. All were staring at him.

"That's the other pilots, there in front of the barracks," Whitey told him. "Come back when you've seen Vliet and I'll introduce you around."

Crane nodded, and as Whitey limped toward the barracks, Crane went on with Ul Kuil toward a smaller building, an office. It was a small, two-roomed metal hut, with rough living quarters in the back room, and a desk and chairs in the front room.

"We're back, Mr. Vliet," Ul Kuil called respectfully into the rear room. "But I was only able to get one pilot."

Crane was looking swiftly around the office. He didn't see any safe. But Vliet surely must keep his rumored millions and his records somewhere here. Where, Crane wondered tensely?

Vliet came stalking into the office from the back room, wiping his hands on a cellucloth towel.

"Time you got back, Ul," he declared, his voice harsh and deep, biting off each word. "I've had to stand double trick supervising the damned Greenie diggers. Haven't had much sleep."

He stared at Crane. "So this is the only pilot you got?"

Crane, his pulse pounding with emotions he tried not to show, returned Vliet's stare defiantly.

He knew now why they called him Black Jan Vliet. A strapping six-footer whose gaunt frame was all bone and muscle, Vliet had a shock of coal black hair, a dark, hard, aquiline face, and eyes as

cold as two chunks of frozen jet.

"This is James Crane, former liner pilot, de-licensed for negligence," Ul Kuil was explaining hastily. "A good man, I think."

"I've heard of you," Vliet boomed to Crane. "Ran your ship into a meteor swarm off Saturn's orbit. Were you drunk?"

Crane flushed hotly. "Look here—" he began.

"Save it," interrupted Vliet. "I don't care what you did in the past. It's what you do for me from now on that counts."

The big mine owner tossed the towel away, hooked his thumbs in his belt, and continued harshly. Crane noticed that he wore a heavy atom-gun at the belt of his stained cellucloth breeches.

"Crane, I don't soft-soap men who sign up with me," Vliet bit out. "You're not here because you want to be. You're here because you damned well can't get a job piloting any place else, and we both know it." His voice was harsh.

"You may have heard that flying umbron is dangerous, and that I'm a hard boss. Both things are true. Flying umbron is dangerous, and plenty. But a pilot who keeps off liquor and watches himself every minute he's in space can beat out the odds. It's up to you—remember, it's your neck."

Vliet went on. "Furthermore, I am a hard boss. You pilots, to me, are just a bunch of criminals, and what's worse, criminals who were stupid enough to get caught. I've not the slightest sympathy for any of you. But you obey my rules and do your job and you won't find me bad to work for. Try to buck me and you'll get it in the neck—I'm the only law there is on Umbriel."

Crane's dislike of this domineering, forceful personality was intense, but he could not deny a certain grudging approval of the man's harsh outspokenness.

"That's straight enough talk," Crane admitted. "Just what are the rules you spoke of?"

"First, you sign on for a year, and get your pay five hundred per month, at the end of the year," Vliet replied. "That's to make it worth our while taking the trouble to bring you here—I can't be sending Ul to hunt pilots every month."

"Second, your duties will include servicing the ships. You must know rocket engineering to get a pilot's license. Third, you leave the Greenies strictly alone, inside or outside the Base. I'll have nobody starting trouble by trying to kick them around."

"All right—sounds fair enough," Crane said curtly.

"Whitey will show you where to bunk in the barracks," Vliet finished, dismissing him. "Oh, yes—one more rule—a personal one of my own. You'll leave Miss Ellis entirely alone, understand?"

"Miss Ellis?" Crane was genuinely astonished. "You mean there's a girl on this godforsaken moon?"

"There is," Vliet answered crisply. "She's a competent rocket engineer and that's all she is, as far as you're concerned."

Crane shrugged indifferently. "Okay, I'm not interested in your 'engineer'."

As Crane strode back out into the pale sunlight, his mind was working tensely.

"Where the devil does he keep his valuables?" Crane wondered. "He must have some kind of safe or hiding place there. I'll have to get a look through that office as

soon as possible."

Old Whitey hailed Crane as the young pilot entered the long, chrom-alloy building that served as barracks. Its furnishings were rude—bunks along the wall, duffle-bags thrown carelessly about, empty bottles in a corner, and a Venusian swamp monkey, the outfit's mascot, shrilling from his perch on a uranite bulb on the wall.

There were four men lounging here, beside Whitey. There were a heterogeneous lot, representing four different planets. They eyed Crane with varying expressions as old Whitey made garrulous introductions.

"Boys, this is Jimmy Crane, our new partner. Crane, this here Martian is Lin Tikim, that escaped from Deimos prison two years ago and don't dare go near Mars now. That stringy Uranian is Quorbos, wanted on three planets for murder. Yonder big Jovian is Herk Kebem, that absent-mindedly broke his captain's neck one day in space. And that pretty-boy Venusian beside him is Kruppa—none of us know just what made *him* a Tenth-Worlder."

"Is this all Vliet's pilots?" Crane asked the old man.

"There's one other—Brad Allison, a young Earthman," the old pilot told him. "Allison flew a shipment of umbron to Jupiter but ought to be back any time now."

Lin Tikim, the big, hard-bitten Martian, only nodded to Crane and said nothing. He looked tough, but a good man, Crane thought. Quorbos, the Uranian murderer, was a thin, yellow, suspicious-looking man who replied to Crane's greeting with only a muttered word.

But Herk Kebem, the huge, good-natured looking Jovian, grinned in friendly fashion.

"Hello, Earthman. You sure were out of your head to come here. I'll bet you regret it already, huh?"

Crane shrugged. "De-licensed pilots can't be choosers."

Kruppa, the pallid, handsome Venusian, smiled sleepily.

"That is unfortunately true," he murmured. "Or I would not be wasting my time in this filthy hole."

"Nobody asks you to stay here," whined Quorbos, the thin Uranian, malignantly. "I, for one, will be glad when you crack up."

"Cut it, Quorbos," snapped big Lin Tikim, the Martian. "If you and Kruppa start scrapping again, I'll lay you both out."

Old Whitey plucked Crane's arm.

"Come on and I'll show you the cruiser that you'll be flying, lad."

Crane followed him out of the barracks.

"Nice bunch of boys you've got," he said ironically.

Whitey cackled. "Like a den of tigers, eh? I told you you shouldn't have come here."

"Isn't Vliet afraid to keep these rumored millions of his here, with such a tough gang about?" Crane asked.

He watched the old pilot closely, hopping for a lead. But Whitey, after a quick glance at him, answered only,

"It appears not."

Crane let it drop. He didn't want to arouse Whitey's suspicions. He followed the old man along the line of parked cruisers.

"This'll be yours," Whitey said, pointing.

Crane stared critically. "Old third-hand heap of junk, like all the others," he grunted. "Let's see inside it."

The door of the cruiser was open. Crane was starting in, when a figure

emerging bumped into him.

"What the devil—" Crane began. Then he stopped, surprised.

It was a girl, slim in mannish space jacket and breeches, her crisp yellow hair brushed severely back from a face whose clear blue eyes and resolute mouth were the outstanding features. Crane thought her pretty as a hawk and as unfriendly looking.

Her lip curled as Whitey introduced Crane.

"So you're another Tenth-Worlder who fled out here to Umbriel to take cover," she said.

Crane was stung. He replied coolly,

"And so you're Jean Ellis, Vliet's 'engineer'?"

He stressed the last word ironically, and Jean Ellis' blue eyes flashed with resentment. She pushed past him, her face crimson with anger.

"Shouldn't have said that, lad," muttered Whitey uneasily. "She's got a temper, and she'll remember it."

"How long has Vliet had her here?" Crane asked.

"'Bout a month," the old pilot said. "He brought her back from a trip over to Uranus—said he'd signed her on as maintenance expert engineer."

Crane grunted skeptically. "Pretty thin. Well, I'm going to look over this old heap. See you later, Whitey."

Crane spent the next hour prodding into the interior of the little two-man cruiser. It was a deplorable shape mechanically, its cyclotrons patched up, its tubes fouled, its instruments erratic.

"Umbron must have a terrific effect on instruments," he muttered, deep in thought.

He heard the rocket roar of a

ship landing, and looked out the porthole window. Another small cruiser was landing beside him.

Crane saw a haggard-looking young Earthman emerge, a youngster who had once been handsome but whose face was pale with fatigue. He guessed it was Brad Allison, the other of the pilots.

"Dissipated-looking kid," Crane thought. "But what the devil goes on here?"

His exclamation of surprise was caused by sight of Jean Ellis' appearance. The slim girl had run up to Allison, was embracing him, speaking to him earnestly.

Crane felt a wry disgust. "What a dame—two-timing Vliet right under his nose! But hell, it's none of my business."

A moment later, he decided he might be wrong. For he glimpsed Jan Vliet's big figure striding down the line of parked ships toward them. Vliet had apparently seen Allison's landing. In a moment, the mine owner would come upon the pilot and the girl—

Crane stepped out of his cruiser and went around it to the man and girl. Allison looked up surprisedly, and the girl's eyes blazed with dislike at sight of him.

"Just because I'd hate to see trouble here right now, I'm taking time to tell you Vliet's coming down the line," Crane told them coolly. "You'd better postpone the lovemaking for a while."

Jean's face went white with fury. "Why, you—" she began angrily.

"Save it," Crane grinned. "It's all right with me if you want to be Allison's 'engineer' as well as Vliet's."

"You dirty rat!" exploded Allison. "I'll kill you for that!"

He tugged at the atom-gun in his belt. Crane instantly dived in a

flying tackle that sent the other man to the ground.

Allison struggled furiously, trying to draw his weapon. Crane, wrestling with the young Earthman, heard a rush of running feet and the angry booming of Vliet's voice.

Chapter III

Under Uranus

Crane got the atom-gun out of Allison's grasp and sent it spinning out of reach. But next moment he felt himself gripped by a powerful hand and hauled to his feet.

"What the devil is going on here?" Vliet boomed harshly as he pulled the two combatants apart.

"Take your hand off me!" Crane flashed, wrenching free. "You may be boss of this moon but you're not pushing *me* around!"

Vliet's black brows drew together ominously. But at this moment, Jean Ellis intervened.

"It's nothing important, Jan," she told Vliet coolly. "Brad and your new pilot got to scrapping when Brad asked this fellow if he was a Tenth-Worlder."

Brad Allison, flushed and panting and eying Crane in intense dislike, made as though to contradict the girl. But she made an urgent, surreptitious sign to the young Earthman, and he held his peace.

Crane saw the gesture, and grinned inwardly.

"Lady, I admire your resourcefulness," he thought.

"Well, quarreling with atom-guns is one thing I won't stand for—I need every pilot I've got," Vliet said cold-bloodedly. "Brad, you come along with me and report on your umbron delivery."

The haggard young Earthman

followed Vliet toward the office. Crane turned his back on the girl and went back to inspection of his cruiser.

As he twisted a chain-wrench onto one of the fouled rocket tubes in the stern, to unscrew it for cleaning, Crane decided that he'd been foolish to intervene to prevent Vliet discovering the man and girl in each other's arms.

"None of my business, really," he thought. "But if there should be a big blow-up here, it would interfere with *my* plans. Otherwise I'd have let Vliet walk right onto that pretty picture."

Tugging at the recalcitrant rocket tube, he was a little startled by a cool, contemptuous voice from behind him.

"If you were a half-competent rocket man, you'd know that those tubes had a reverse joint," it said. "You can tug all day without getting it out that way."

Crane turned, sweating and exasperated. Jean Ellis stood watching him scornfully, her hands in the pockets of her mannish breeches.

"What the hell do you know about it?" he demanded.

"What the hell makes you think you can talk to me that way?" she snapped back, bristling.

Crane waved wearily. "Go away, lady—go play with your boy friends, either of 'em. But just don't bother me."

"You pig-headed idiot!" she snapped. "Here—give me that wrench."

She grabbed it out of his hand before he could protest, gave the rocket tube a reverse turn, pulled it out an inch, then swiftly unscrewed it.

"There, pilot," she said disdainfully, tossing the wrench to the ground. "Maybe you can carry on

from there."

Crane watched her walk away. "Well, I'll be damned!" he muttered. "She does know something about rocket engineering. Wonder if she really took a job here on the level? Oh hell, no—what girl in her right mind would come to this little devil's world?"

Crane had finished cleaning the fouled tubes by the time the nine-hour day of Umbriel ended. As dusk came, he started, tired and dirty, toward the barracks.

Uranus glowed green and huge in the starred heavens overhead, casting its weird luminescence over the seething jungle outside the stockade, watched by Vliet and fat Ul Kuil.

He learned that all here took their meals together in the metal cook-shack presided over by a nondescript, unclean-looking little Martian. Vliet sat at the head of the table, with Jean Ellis at one side of him and the paunchy Saturnian on the other. Ul Kuil ate noisily and with extreme gusto of the indifferent canned food.

Vliet looked down the table at his seven pilots, his black eyes sardonically amused.

"What a happy little family we have here!" the mine owner boomed satirically. "So united, so devoted to each other! It shows how the influence of raw nature can bring out a man's better side."

"Aw, you're just poking fun at us again," growled Herk Kebem, the big simple-minded Jovian.

Kruppa, the Venusian, smiled sleepily.

"It's our employer's only amusement, Herk—to prod the prisoners in his little cage now and then. You shouldn't begrudge it to him."

"Thank you, Kruppa," said Vliet

with mock courtesy. "And how do you like the prison cage by now, Crane?"

Crane shrugged. "Frankly, it's no pleasure resort. But I expect to make the best of it."

"You hear, Jean?" asked Vliet mockingly of the girl. "Our new pilot is a philosopher."

As he spoke, Vliet let his arm drop carelessly around the girl's shoulders. It seemed to Crane that she stiffened slightly at the possessive gesture. And he saw Brad Allison, flushing, start to get up and then sink back as Jean's eyes met his imploringly.

"By the way, Crane," Vliet said casually, "you'll make your first umbron delivery for me tomorrow. Just a two-day jaunt, over to Uranus. You'll deliver the stuff in Uranopolis. Allison here will go along to show you the ropes."

Brad Allison looked up suspiciously.

"Why do I have to go along? Crane doesn't need me and I just got back from one trip."

"Nevertheless, I want you to go," Vliet said, with steel in his voice. "Crane's never flown umbron before."

Allison subsided. Jean was the first to leave the table, and the haggard young pilot followed soon after.

"Come on, Ul," Vliet said, rising and stretching his powerful arms. "We've got to check the supplies you brought in today—you can't sit there stuffing yourself all night."

When Vliet and the Saturnian were gone, big Herk Kebem broke into a guffaw of laughter.

"The boss must be getting wise to what's going on between the girl and Allison!" laughed the Jovian. "He's going to get rid of Brad for a few days."

"How could he miss seeing it?" whined Quorbos, the Uranian. "The girl and Allison have been thick ever since she came here."

Crane paid little attention to their talk. He was dismayed by the news that he must leave in the morning. That meant postponing the plan that had brought him here—or else making the attempt on this very night!

Crane's pulse jumped. If he could get what he wanted tonight and take off for Uranus in the morning—He decided instantly that he'd try it. If he could just find Vliet's secret safe—

"My night for guard trick," grumbled Herk Kebem as they walked out and stood yawning under the vast green bulk of Uranus.

"See that you keep awake," advised old Whitey acidly. "One of these nights when you're sleeping out your guard trick, those Greenies'll come swarming over the stockade onto us."

"Hell, they'll never bother us as long as Vliet keeps giving them pretty broken glass for that chuckle-headed stone meteor god of theirs," scoffed the big Jovian.

"Nevertheless, you keep awake," Whitey emphasized. "I got a healthy respect for the ungodly weapons them devils use."

Crane stretched out as his bulk in the dark barracks, and lay pretending sleep for two hours. There was no sound save the stirring of some other pilot, and the occasional distant, coughing grunt of some creature out in the crawling jungle.

Finally, Crane softly arose. The others lay snoring. He slipped soundlessly out of the barracks and headed toward Vliet's office, keeping within the shadows and out of the revealing green glow of the huge planet

overhead.

He passed the metal shack that was Jean's quarters, and listened a moment at its door. No sound. He stole on, and soon was at the open window of Vliet's bedroom behind the office.

Crane could hear the heavy breathing of the mine owner. Carefully, he reached in his pocket for a flat metal case. He hadn't come here without the burglar's equipment he'd figured he might need!

From the case, he took a thin glass oval capsule, and tossed it into Vliet's bedroom. He could barely hear the pop as it burst. Quietly, he closed the swinging window, and waited tautly.

There was still no sound. Crane slipped around to the door of the office, which he found unlocked. He entered and padded back to the bedroom, holding his breath as he entered it, and flashing a tiny needle-light onto the cot in the corner.

Vliet lay comatose, in deepest slumber. The highly condensed super-anesthetic gas in the capsule had done its work—Vliet could not awaken for hours. Crane opened the window again, to let the gas escape. Then he returned to the office.

Using the tiny ray of his needle-light, he began a quick, tense search. The desk was his first objective. He hardly expected that Vliet would keep anything very valuable in it. And he was right, for no money or records or anything else of value was in it.

Crane turned to the cupboard in the corner. Here, too, he was disappointed. There were some atom-guns, pistols and heavy rifles, and space jackets, but nothing else.

Baffled, he went back to the bedroom. Paying no heed to the unconscious sleeper, he searched thor-

oughly the room's scant furniture. Again, he was disappointed.

Crane began to feel black discouragement. He returned again to the office and started sounding the metal walls and floor with gentle rappings, kneeling and listening to the echo. There was no sound to indicate a hidden space.

"Hell, he must have *some* hiding place here!" Crane muttered baffledly, rising to his knees.

A small, hard object suddenly prodded his back. From the darkness behind him a soft voice spoke quickly.

"Don't try anything! Stand up—and keep your hands away from your belt and turn around."

Appalled, Crane slowly obeyed. He swung around, his upheld hands swiveling the tiny ray of his light. It fell on the man who covered him with an atom-pistol, on a pallid, sleepy face.

"Kruppa!" exclaimed Crane astonishedly. It was the Venusian pilot.

"I was not asleep in the barracks," Kruppa smiled. "I saw you slip out. So you're after Vliet's hoard, eh?"

"What's it to you?" Crane demanded in a harsh whisper. His mind was racing. Was the Venusian going to give the alarm?

"It's a great deal to me, for I'm after Vliet's hoard myself!" Kruppa answered coolly.

The Venusian, eyeing Crane, seemed to have reached a decision.

"We can't talk here. Go on out—behind the cook-shack. I'll be right behind you."

Crane obeyed bewilderedly. In the shadows behind the little metal hut, Kruppa talked softly, still holding his weapon.

"Listen, Crane," said the Venusian urgently. "I'm putting my cards on

the table. I only joined this crazy crowd because I'd heard of the millions Vliet has hidden here, and decided to get them. I know now you came for the same purpose. You don't deny it?"

"Go on," Crane said tightly. "I'm listening."

"I've hunted for Vliet's hoard since I came here," Kruppa continued, "but it's hidden so cunningly I can't find it. Now, however, I've a plan that'll make Vliet himself disclose his hiding place. But I'll need help for the getaway. You and I could swing this job perfectly together. Why not throw in with me, and we'll divide Vliet's hoard?"

Chapter IV

Meteor God

Crane, thinking rapidly, looked doubtful.

"We'd divide fifty-fifty?"

"Fifty-fifty," Kruppa promised. "I give you my word on it."

Crane felt that the Venusian criminal's word was worth exactly nothing. But he hadn't been able to find Vliet's cache, himself. And if Kruppa had a plan that would find it—

"All right, count me in," Crane said decisively. "What's your plan?"

"I can't tell you it all now—we daren't talk here long," Kruppa said hastily. "But I'll tell you this—Vliet's fortune isn't in money. I learned that before I came here. It's in 'solid power'."

"Solid power?" Crane repeated.

"Solid power" was, he knew, the most super-valuable substance in the Solar System. For it wasn't really a substance at all, but compressed energy "frozen" by temporary transformation into artificial atoms.

Trillions of units of power could be compressed thus into an inch-

square cube of what looked like blue-white ice. And a suitable transformer would, when desired, turn it back into almost limitless power.

"Vliet converted all his profits into 'solid power' for easier safe-keeping," Kruppa was saying. "He has at least ten cubes of it."

"Whew!" Crane whistled softly. "The stuff's worth a million Earth dollars a cube."

Kruppa shrugged. "Vliet's umbron monopoly is profitable, my friend. But you see how he could easily hide those ten cubes in some small space. Where, I don't know. But my plan will find it."

"But I'm rocketing for Uranus in the morning with Brad Allison, under Vliet's orders," Crane said anxiously.

"It'll take me two days to prepare what I need for my plan," Kruppa reassured him. "You'll be getting back by then."

Both men stiffened as they heard a heavy footstep by the main gate of the stockade, and glimpsed a dark figure moving there.

"Only Herk Kebem trying to keep awake on guard," muttered Kruppa. "But we'd better break this up. You'd better not be seen with me in the morning, either."

"Okay," Crane nodded. "I'll go back to the barracks first."

Lying on his cot in the dark, Crane's mind feverishly considered the complexities of the thing. He didn't know what Kruppa's plan was. On the other hand, Kruppa didn't know what *his* plan was.

Next morning, Kruppa gave no special attention to Crane. His sketchy breakfast over, Crane went out and found that Ul Kuil was letting the Greenies into the stockade for their day's work.

Vliet came striding up to Crane.

The mine owner's face looked heavy, his eyes red-rimmed, from the anesthetic gas effects. He was quite evidently in a vile humor.

"You'll start as soon as the Greenies get the umbron in your cruiser," Vliet said harshly. "Your ship's ready?"

Crane nodded. "I saw to it yesterday afternoon."

He watched as the Greenies, under Vliet's orders, brought the heavy lead cases into the cabin of the old cruiser. The Greenies, seen thus closer, looked even more alien and unattractive to Crane—their ugly, yellow-green bodies, staring, pupil-less eyes and chattering voices giving an altogether repellent impression.

Crane opened one of the chests curiously. The umbron was simply a heap of gray rock chunks, to all appearances.

"Close that chest!" Vliet snapped. "Do you want to blow all the ship's instruments before you start?"

"The radiations of the stuff are that powerful?" Crane said incredulously. "No wonder commercial craft can't carry it."

Vliet nodded sourly. "The stuff's poison to all electrical and magnetic circuits."

The mine owner strode out, and shouted.

"Allison! Where the hell are you?"

Crane saw Brad Allison coming, with the slim figure of Jean beside him. The girl was talking earnestly, almost pleadingly, to the sullen-looking youth. Vliet's brow darkened at sight of them.

"Time to blast off," Vliet rapped. "I expect you back by tomorrow evening. And don't bring a single bottle of liquor back, Allison—I've had enough of you lying around drunk and useless."

Allison's mouth tightened but he made no answer. Crane felt a hand on his arm and turned. It was Jean.

"Will you keep an eye on Brad?" she asked him, her ordinarily defiant eyes now worried. "He's in a dangerous mood."

"Lady, I've enough to worry me without bothering about the moods of your various boy friends," he told her.

"I should have known better than to ask you," she flashed furiously.

Crane, shrugging, climbed into the cruiser. He took the pilot's seat, while Allison closed the doors.

Cyclotrons droned shakily, and Crane eyed the gauges, then slammed the throttles open. The old cruiser fairly jumped upward.

The yellow-green sphere of Umbriel dropped away fast beneath them. The uncertain drone of the cyclotrons, the thunder of tubes and the throb of oxygenators filled the ship. Crane glanced mechanically at the gravimeters, then swore startedly. They showed him only two hundred miles from Umbriel when he knew he was at least a thousand.

Allison, noting his amazement, laughed mirthlessly.

"You might as well forget those instruments," he advised. "With umbron in the ship, they don't mean a damned thing."

"So I see," Crane muttered. "Meteorometers haywire, too. It's a good thing this is just an easy hop over to Uranus."

"Wait till you find you self trying to run a shipment of umbron through the asteroid belt, with all your instruments crazy," Allison predicted bitterly. "And Vliet'll send you, sooner or later."

Crane began to see why a day each way was allotted for the short

one hundred seventy thousand-mile hop to Uranus. Flying blind as they practically were, they wouldn't dare zip in toward the planet at high speed, for deceleration would have to be by guess instead of by instrument.

Allison was moodily silent as the old cruiser throbbed ploddingly along, cutting in behind the pink globe of the inner moon, Ariel, and following a long spiral course around the vast, cloudy-green mass of the planet.

Uranopolis, biggest city of the planet, was on the dark side when Crane finally brought the cruiser down toward it. The space port, a black blot rimmed with white lamps, rushed toward them. Crane sweated as his fingers flashed over the throttles, his keen gray eyes peering strainedly down through the glassite.

With a crashing bump and bounce, they landed on the cement tarmac. Crane breathed a heartfelt sigh of relief.

"I'm damned if I'd want to land without instruments every day!" he exclaimed.

Brad Allison unstrapped himself and suggested, "I'll arrange for delivery of the umbron. You've earned a rest."

Crane went out and leaned against the cruiser's hot side, smoking a *rial* leaf cigarette, while Allison was gone.

Saffron-skinned, stringy Uranian officials and porters came with the proper invoices, and removed the heavy chests of umbron. But Allison still did not return. Crane finally went to bed in one of the cabin space bunks. It wouldn't be possible to start until morning anyway, with the instruments as erratic as they were.

But in the morning, he awoke to

find Brad Allison still gone. Crane was on the point of starting toward the black towers of the Uranian metropolis to look for him, when he saw Allison coming.

Allison was stumbling and reeling as he approached the cruiser. And Crane saw the young Earthman's face was flushed deeply.

"You're drunk!" he said disgustingly.

"Sure I am," Allison answered thickly. "Vliet said not to bring a single bottle back to Umbriel—so I'm bringing a skinfull."

He snickered. Disgustedly, Crane shoved him into the ship, then closed up, started the cyclotrons, and applied himself to the ticklish business of a blind take-off without instruments.

He was relieved to get the old cruiser off Uranus without mishap. When he had got clear of the huge green planet's atmosphere and was heading back out toward the yellow disk of Umbriel, he found Allison lolling stupidly in the space chair beside him.

"Good take-off," Allison approved drunkenly. "You're a swell pilot, Crane, whatever else you are. I was a good pilot once too—till I killed my co-pilot in a quarrel and had to skip."

"I'm not interested in your past," Crane said brutally. "Drunk as you are, you're a lot of help to me on this trip."

"Oh, hell, Vliet didn't send me along to help," Allison jerked out. "He just wanted a clear field to make another play at my sister."

"Your sister?" Crane exclaimed, genuinely startled. "You mean that Jean—"

"Sure, she's Jean Allison, my kid sister," hiccupped the drunken young man. "She learned I'd fled

out to Umbriel and she came after me, by signing up as Vliet's rocket engineer. She's really a swell engineer, too, but Vliet wasn't thinking of that when he hired her, damn him! He'd never have brought her if he'd known she was my sister. And he's been trying to make a play for her ever since."

Crane was stupefied. "That girl came out to that hell's moon and has stayed there and fended Vliet off, just to be near you?"

"She came to persuade me to go back to Earth and give myself up," Allison admitted thickly. "Hell, I can't do that, and I've kept telling her so. How can I go back when it'll mean five years or more in prison for manslaughter?"

"Well, of all the damned worthless pups I ever heard of, you're the worst!" Crane exploded. "You let your sister stay on that devil's moon, living with a bunch of Tenth-Worlders and trying to keep Vliet's hands off her, just because you're too weak to go back to Earth and face the music!"

"Say, you can't talk to me like that," Allison declared in thick-voiced resentment. "Who are you to preach? Just a pilot whose negligence wrecked a liner and killed six hundred passengers."

"Shut up, before I smear you," Crane said disgustingly.

Allison soon subsided into a drunken sleep. As the battered old cruiser throbbed toward Umbriel, Crane had plenty to think of.

He hadn't liked Jean Ellis—Jean Allison. He never did like these mannish girls who were becoming rocket engineers and pilots nowadays. But he had to admire her for her courage in coming to Umbriel under the disguised name to rescue her weakling brother.

Crane's thoughts swung to his own purpose on Umbriel. He wondered if Kruppa had made preparations for his plan, and wondered again what the Venusian's plan was. The man had left him entirely in the dark.

Crane brought the cruiser down toward the stockaded clearing of Vliet's Base, just as the pale sunset light washed it.

When they emerged, three of the pilots strolled up—Quorbos, Lin Tikim and the big Jovian. Jean was with them, and she uttered a little cry of dismay as she saw Allison reeling on his feet.

"Oh, Brad, you're drunk again!" she exclaimed miserably.

"S'all right," Allison said thickly, patting her shoulder. "I'm feelin' fine."

"I'll help you to the barracks—come on," the girl said anxiously, putting her arm around his shoulders as he staggered.

Allison allowed her to guide him.

Quorbos, the stringy saffron Uranian pilot, snickered as the girl and the young Earthman went away.

"Hope she'll help me home some time—and even tuck me in," he remarked.

"Keep your talk off her," Crane said curtly.

Quorbos stared. "So you think you're going to make a play for her too?" he whined maliciously. "She already has Vliet and Allison—"

Crane brought his right fist up in a savage uppercut that sent the Uranian sprawling. The stringy pilot scrambled up, raging.

"I'll kill you for that!" he shrieked. "I'll—"

"Cut it—here comes Vliet!" Herk Kebem said loudly.

Quorbos, glaring hate at Crane,

subsided. Vliet was stalking toward them, with old Whitey trotting after to overtake him.

Crane handed Vliet a folded paper.

"Receipt for the umbron delivered. We had no trouble. Allison's gone to turn in."

"Yes, I saw him," Vliet rasped, his face black with anger. "And I—"

Old Whitey reached the group at this moment. The veteran Earthman pilot's leathery face was worried.

"Kruppa went out into the jungle and hasn't come back yet—said he was going over to the Greenie village," Whitey told Vliet anxiously. "And it's almost time to lock up the stockade."

Vliet swore viciously. "Damn Kruppa! I've told you all to let the Greenies alone. Whitey, you and Crane go after him."

Crane hurried with the old Earthman across the base to the stockade gate. In the sunset, the Greenies who had been digging in the workings under Ul Kuil's supervision were now laying down their tools.

"Crazy Venusian has no business poking around outside the stockade this late," Whitey was muttering. "If he's had trouble—"

They had entered the jungle. It was a solid mass around them, growing darker by the minute, with the weird green glow of Uranus sifting down between the flat fronds of the bigger trees and the crawling, creepy rootless lianas and shrubs.

Luminous insects swarmed around them, and moon-pigs coughed and grunted nearby. They were following a vague Greenie path that ran westward. Whitey stopped suddenly to detour carefully around a rotted trunk, upon the side of which hung two things like bulging white

Pods.

"Blood-fungi," grated the old man to Crane. "Don't touch 'em—they're the most horrible way you can die, if you break one."

Then Whitey raised his voice in an echoing call.

"Kruppa! Where the devil are you?"

Crane sensed something tense, foreboding, about this darkening jungle. Or was it just that his nerves were harp-string taut?

"Kruppa!" yelled Whitey again. This time came a distant answer.

They pressed forward, and entered a little glade in the jungle. The green glow of Uranus illuminated it. A huge, grotesque object towered at its center, and Kruppa was coming toward them from that point.

"What the devil are you doing here, fooling around the Greenies' god?" Whitey demanded of the Venusian. "You know Vliet don't allow that."

"I just wanted to see their meteor god you others talked about," Kruppa replied. "Queer-looking old thing, isn't it?"

Crane stared. The looming object was a meteorite, half buried in the ground. It had accidentally the shape of a grotesque, gargoyle head—a monstrous head, inclined drunkenly forward.

All around this strange visitant from the sky lay bright stones, pieces of glittering minerals, and a great many chunks of ordinary broken glass that were brilliant in the green glow from Uranus.

"The Greenies have worked months for Vliet to get all that broken glass to put here—think of it!" laughed Kruppa.

"We'd better get back to Base," rapped Whitey. "And you'd better not let Vliet know you were out

here."

As they hurried back to the stockade, Crane sensed a suppressed excitement in the Venusian's manner. Kruppa kept glancing back over his shoulder constantly. Crane had no chance to talk to him.

Complete night had fallen as they hastened into the stockade. Ul Kuil was just letting the greenies out. Each of the chittering creatures clutched his wages for the day—a scrap of shattered glass.

The fat Saturanian and Whitey swung the steel stockade door shut and locked it. It gave Crane a chance to whisper to Kruppa.

"Your plan?" Crane asked swiftly. "Your scheme to find Vliet's cache—have you worked it out yet?"

"No time to tell you now," Kruppa muttered rapidly. There was perspiration on his forehead, an almost fearful look in his eyes, as he added,

"I've got everything set. Get ready—for hell is going to break loose here!"

"Crane! I want you!" bellowed Vliet from the office.

Crane strode toward the building. Had Vliet discovered Kruppa's plan? What was that plan? What was going to happen?

Crane found Vliet standing in front of the office, his powerful figure towering dark in the green light, his face grim.

"Crane, I found these in my bedroom this morning," Vliet said harshly. "I *thought* I'd slept a little too heavily last night."

The mine owner held out his hand. In it were tiny flakes of glass—fragments of the anesthetic gas capsule Crane had used.

Crane's heart jumped, but he kept his face calm and said coolly,

"Well, what has that to do with me?"

"I found a case containing other gas capsules in your jacket just now, while you were gone with Whitey," said Vliet grimly. "You were in my quarters last night, snooping around, weren't you? Yes, and I know just *what* you were snooping for, Mr. Crane."

The other pilots were gathering, amazedly listening. Jean was among them, her clear face frowning puzzledly at Crane.

"I suppose you think I've been rummaging to find the hoard of millions you're supposed to have," Crane sneered.

Vliet shook his dark head grimly.

"No, Crane—I know you're not after my money. You're after my *records*. You want to know whether or not I made a certain shipment of umbron from Uranus six months ago."

For a moment, Crane couldn't believe his ears. How could Vliet have discovered what he, Jimmy Crane, had come to Umbriel for? He'd planned every step so carefully, he'd thrown himself in the way of Ul Kuil on Mars to be offered a job on Umbriel, just to get here without arousing suspicion. And Vliet had known all the time!

"You know?" Crane gasped unbelievably to the mine owner.

Vliet nodded sardonically. "I've known just what's in your scheming little brain since you came here. You believed that your space liner ran into that meteor swarm six months ago, not because you computed the course wrongly as you were accused of doing, but because there was umbron aboard whose radiations made the instruments erratic. You figured that out from some clue, and thought you'd come out here and get hold of my records and prove it, and so clear yourself,

eh?"

Vliet laughed harshly. "Why, you clumsy fool, I knew as soon as I saw you what you were here for. And I can tell you that you won't find any such record or evidence as you're after. But you can stay here and keep trying to find it, for I need pilots and I'm not one damned little bit afraid of anything such fools as you can do against me."

Crane's stupefaction had passed. A cold, deadly feeling such as he had never before experienced now possessed him.

"Vliet, you've as good as admitted that you *did* ship umbron on the *Vulcan*," he rasped. "I've found out from the others here that six months ago, you were short of pilots. You had to make a delivery of umbron to Mars, so you took the stuff to Uranopolis and smuggled it onto my liner. You caused that wreck, and you're going to confess it publicly!"

"Don't be ridiculous," Vliet scoffed. Then, seeing the deadly look in Crane's eyes, he flashed out his atom-pistol. "I don't want to kill you, Crane! I need pilots. But if you force me—"

"Jimmy Crane! Don't!" cried Jean sharply.

Crane was deaf to her appeal. Through the red mists of hate he could only see Vliet's face, as he crouched to spring—

Boom! The rocking detonation came through the night from the green-lit jungle westward. A moment later, it was followed by a distant uproar of chattering screams, rising to a raging chorus.

"That was an explosion!" Vliet cried, stiffening. He turned, black eyes flaring. "Kruppa, you were out in that jungle tonight. What—"

"Boss, listen!" old Whitey cried frantically. "Those are the Greenies'

war-pipes!"

A skirling, screeching wail was now rising out of the planet-lit jungle, a sound whose weirdness made the hair bristle.

Ul Kuil's teeth chattered. "Whitey's right—those are their war-pipes starting!" the fat Saturnian babbled. "Remember, we heard them before when the Greenie tribes were fighting!"

"This may only be another tribal battle," Vliet said harshly. "But that explosion—"

He suddenly boomed commands. "Ul, turn the current into the stockade! White, break out the atom-guns and the masks! Hurry!"

Dynamos in the work-shack started droning as Ul Kuil turned a lethal current into the steel stockade. Whitey came tumbling back from the supply shack with heavy atom-rifles and light face masks.

"Masks on, everybody—if they come, they'll use the blood-fungi!" Vliet boomed. "Positions as follows: Ul and I will cover the west wall and gate from my office; Whitey and Herk Kebem watch the north wall from the cookshack; Kruppa and Crane cover the east side from the barracks; and Lin Tikim and Quorbos hold the south side from the work-shack. Jean, you'd better stay with me," he added curtly.

"No, I'm going to my brother!" she flashed, and sped to the barracks.

"Brother? Allison?" Vliet repeated. Then he laughed harshly. "This seems to be a night for finding out things. Get going!"

The towering mine owner had completely ignored Crane except to bark his orders. And Crane, even in his white-hot passion, realized that in this possible peril, his own vengeance must wait.

He ran with Kruppa toward the barracks.

"Mask on!" the Venusian cried through the respirator of his own mask. "You've never seen a man hit by that fungi-death!"

Crane jabbed the mask over his face. He and Kruppa gained the barracks, crouched with their heavy atom-guns inside its door, watching the east wall of the green-lit compound. He could hear Jean trying to awaken her brother, could hear Allison's half-drunken muttering.

The screeching, nerve-rasping wail of the Greenie pipes stopped suddenly. The silence rushed back over everything.

"Maybe they're not coming to attack us at all," Crane said hopefully.

Kruppa laughed mirthlessly. "They're coming, my friend, you can rely on it. You see, I slipped an atomic time-bomb under their god."

"Then *that* was the explosion!" Crane grasped. He was thunder-struck. "You fool, why did you do that? Do you realize you've set the Greenies now to destroying this whole Base?"

"Sure, that's been my plan," Kruppa retorted coolly. "My plan to find Vliet's treasure cache."

The Venusian's pallid face was feverish with excitement.

"The Greenies'll besiege us here. They'll never work for Vliet again, and he knows it. What'll happen? Why, Vliet'll decide to get away from this moon with his hoard. He's no coward, but he's a ruthless realist. He'll bring out his treasure of 'solid power' and start to leave. And when he does, I'll take his treasure away from him, and beat it. Clever, isn't it?"

"You murderous idiot!" Crane blazed. "To get your hands on Vliet's millions, you've imperilled the life of everyone here."

"Sure—so what?" Kruppa countered nonchalantly. "You've got to run risks for high stakes. And we can all get away in the cruisers."

Then the Venusian laughed. "But I forgot what we just found out—that you're here after Vliet's records, after evidence to clear your own record. All the better—I won't need to share with you."

"There they come!" bellowed Herk Kebem's voice from across the compound.

Greenies were spilling out of the jungle, racing across the narrow clear ground to the stockade on all sides. Crane sighted at one of the other creatures in the lead, pressed the firing button on his atom-gun, saw the Greenie fall as the thin, crashing bolt of atomic fire streaked and struck.

Kruppa was firing coolly and deliberately beside him, and between every shot, the Venusian glanced back across the compound toward the office from which Vliet and Ul Kuil were covering the west wall. He was obviously waiting for Vliet to start his flight.

A screaming chorus of raging, chattering voices mingled with the crackling crash of the atom-guns. Then Crane saw the foremost Greenies reach the stockade, and hammer at its gate. As they touched it, they fell writhing.

"Currents got 'em!" Vliet's voice boomed muffledly. "Hold your fire."

"Here come the fungi!" yelled Whitey's voice desperately.

Crane saw that the Greenies had recoiled from the deadly steel fence. Now many of them were whirling what looked like crude slings. Pod-

like white objects came sailing into the compound.

They were the spore cases of the so-called blood-fungi which Crane had seen in the jungle. He saw them smash inside the compound, emitting clouds of fine, floating white spores.

"Keep your mask on, for God's sake!" Kruppa muttered.

Crane turned momentarily, saw that Jean had been putting a mask onto her drunken, unconscious brother. She came to his side.

"Try to get those Greenies!" Vliet's yell ordered.

The atom-guns began to crackle again, this time in irregular rhythm. Crane, crouching, could hardly discern the Greenies against the yellow-green tangle of the jungle, in the weird green Uranian light.

Then he saw what he thought was an arm whirling. He fired. The streak of fire from his weapon brought a distant scream of agony. He fired at another slinger, missed. More fungi-pods were breaking in the compound. The air seemed full of floating white dust.

Through the rattling crackle of atom-guns, Crane heard Vliet's harsh yell.

"Ul, come back here!"

Ul Kuil had run out of the office, and the fat Saturnian was stumbling in a waddling run toward the nearby cruisers.

"I'm not going to stay here and die that way!" came the Saturnian's muffled, panicky scream from under his mask. "I'm going—"

"My God!" Kruppa breathed.

For Ul Kuil, fleeing in panicky, clumsy haste toward the cruisers, had tripped and fallen heavily. The mask flew from his face.

"Don't look!" Kruppa cried in horror to Jean. "Don't watch—"

The Venusian swung the girl around so she couldn't see. Next moment Crane, retching with horror, wished he had turned also, as he saw the ghastly thing that in the space of seconds befell Ul Kuil.

The stout Saturnian, scrambling to replace his mask, suddenly stopped and clutched his stomach. A terrible expression of anguish contorted his moon face—he uttered a hideous howl of agony.

He fell, writhing. And Crane saw the Saturnian's stout body swiftly *swelling*, puffing out bloatedly like a balloon being blown up. It became monstrous, incredible in size. And it *burst*, and from within it exploded a billowy mass of the swiftly reproducing white fungi.

"Fungi-death," Kruppa said, his voice hoarse and shaky. "You know now what happens if those fungi-spores get inside your body by nose or mouth, Crane. They batten and multiply on blood and tissue, and devour the whole interior of your body in two minutes!"

"God!" breathed Crane. "Why don't the spores affect the Greenies?"

"They're apparently immune through adaptation," Kruppa jerked. "But they know from past experience that we are not immune."

Crane found Brad Allison at his side. The young Earthman was staring dazedly through his mask eyeholes.

"What is it? Attack?"

"Get those devils with the tree!" rang Jan Vliet's yell.

Out of the jungle through the greenish dusk had rushed a mass of Greenies bearing an immense dead tree trunk, heading straight toward the gate in the west wall of the stockade.

Crane and Kruppa fired together. Streaks of white atomic fire blazed

then from every one of the defended buildings. The terrific volley cut through the barred steel gate and scythed down the onrushing Greenies.

But even as they fell, the massive tree trunk they carried had crashed into the gate. It shattered, hung like a broken jaw from one hinge. With skirling screeches, the Greenie horde rushed toward it.

Vliet's powerful figure leaped toward it.

"Come on! We're got to close that gate! Once they get in here and tear the masks off us, we're done!"

Crane and Kruppa plunged after Vliet and Whitey and the others. Crane heard Jean's sharp cry, and was aware that Brad Allison had snatched her atom-gun and was running with them.

They shot as they ran, into the insurging Greenie mass. The current in the steel fence was broken by the shattering of the gate. The Greenies were already flowing through the opening.

Crane felt his gun hot in his hands as he shot from the hip. The Greenies were but a few yards away, charging blood-mad, going down in dozens, but still coming on.

Crane's gun went dead, its atomic charge exhausted. He clubbed the heavy weapon as a howling Greenie leaped at him from the right. He glimpsed the glaring, pupil-less eyes in the hideous face—and then sent the gun butt smashing down onto the conical head.

Rubbery arms gripped Crane from behind, and a yellow hand snatched at his mask. Thought of what it would mean to lose the mask, in this cloud of floating fungi-dust, nerved Crane to convulsive strength as he drove his elbows back and shook the Greenie loose.

He whirled around with a fierce muffled yell, and the barrel of his atom-gun caught the creature's face and pulped it.

Two more Greenies leaped out of the howling mêlée toward Crane. One of them crumpled in mid-air as somebody's shot sent a fire-streak through his body. Crane desperately sidestepped the other's leap, and as the Greenie hit the ground, the Earthman furiously clubbed him down with his gun butt.

Sweating, half blinded and almost suffocated beneath his mask, Crane heard a yell of agony so intense and awful that it knifed even through the unholy din.

It was Quorbos, the Uranian, who screamed. His mask had been twitched off, and the man was falling in torment, his body swelling up horribly, and in a moment exploding into a billowy white mass.

Crane felt sick but he managed to grab up the Uranian's gun. It still had some charge, and he felt the kick of it in his hand as he pressed its button and scythed a fire-streak across the now-recoiling Greenies.

"They're giving way!" he yelled hoarsely. "Push 'em back!"

The Greenies broke and ran toward the jungle. And Crane shouted to the other staggering men.

"Quick, fix the gate up! Get clamps, Whitey—hurry!"

They labored to repair the shattered gate. Fungi-pods burst among them as the Greenies in the jungle howled like demons.

Crane heard Kruppa utter a fierce exclamation.

"Look! While we've been fighting, Vliet's been making ready to pull out!"

Crane turned and saw. Vliet, a small metal case in his hand, was

just vanishing into his own cruiser at the head of the line of parked ships.

"He's realized it's hopeless and is going to take off with his 'solid power' hoard!" Kruppa snapped, eyes glittering. "What he doesn't know is that I sabotaged his cruiser so he can't leave!"

And, drawing an atom-pistol from inside his jacket, the Venusian bounded toward the cruiser into which Vliet had gone.

"Kruppa, come back!" Crane yelled. "We've got to fix this gate!"

But the Venusian paid no heed. Crane, laboring furiously, found Jean Allison beside him, working deftly to affix the clamps.

"This is no place for you—get the hell back into the barracks!" he cried to her.

"I told you that you couldn't talk to me like that!" she bristled. "Hand me that other clamp!"

In a few minutes, they had the gate shakily repaired. Crane saw that Whitey and young Allison, and Lin Tikim and the big Jovian, though battered by battle were not seriously hurt.

"Jean, get fresh guns from the supply shack!" Crane snapped. And as she ran to obey, Crane himself headed toward the cruiser inside which Kruppa had followed Vliet.

He found Vliet lying, choking blood, a hole burned through his chest. And Kruppa stood, atom-pistol still in his hand, gloating over an opened metal case in which lay a dozen small, translucent, blue-white cubes of the fabulously valuable "solid power."

"I've got it and I'm getting out of here in one of the cruisers!" Kruppa exclaimed. "You'd all better take off in the others if you want to save you necks."

"You fool, why did you shoot him!" Crane blazed. "He was the one chance I had of clearing my record."

Kruppa laughed dangerously. "His life means no more to me than your precious record. Get out of the way—I'm leaving!"

Jan Vliet sat up, with an agonized effort. The big mine owner's dark face was bloodless around his mask, and he clutched his wounded breast as he spoke gaspingly to the Ven-
usian.

"You're not going, Kruppa—you're going to die here," Vliet choked. "I figured it was you who caused that explosion and aroused the Greenies. And—I determined you weren't going to get away alive, even though everyone else here had to die."

"What did you do?" Kruppa cried, suddenly tense.

Vliet laughed weakly. "I sabotaged every ship here except this one, before I started to leave—ran through the cruisers just now and fired a blast into the cyclotrons of each one."

"Gods of Venus!" Kruppa whispered, appalled. "And I had previously crippled this ship so you couldn't get away."

Vliet laughed again, more weakly, but triumphantly, the hard, ruthless spirit of the man blazing as his life flickered low.

"Yes—it works out nicely, doesn't it? None of us can get away from here now. The Greenies will get you, Kruppa—they'll get you and everybody else here!"

Chapter VI

Last Stand

Crane was appalled. "It'll take

days to repair the ships" he breathed. "We'll have to hold the Greenies off—"

"You can't do it," Vliet chuckled weakly. "There aren't enough atom-guns."

"Damn you, I'll finish *you* now!" swore Kruppa, ragingly, aiming his atom-pistol at the fatally wounded mine owner.

Crane struck his arm up. "None of that! You've got us in a bad enough mess, you and your clever schemes!"

Jean Allison came hurrying into the cruiser. The girl looked horrifiedly at Vliet's ghastly appearance, and then turned urgently to Crane.

"I could only find two fully charged atom-guns!" she cried. "We can't hold the Greenies back long with them—they'll come through onto us in their next rush."

Crane was staring at the little blue-white, translucent cubes in the case Kruppa held—the precious "solid power."

"We've just one chance—that 'solid power,'" Crane said rapidly. "There's power enough in each of those cubes to make a blast that will destroy a million Greenies."

"But we haven't any transformer to convert the cubes back into energy!" Jean objected.

"We'll have to make one," Crane rapped. "The transformers used are simple enough—I've worked with them in ships that used 'solid power' fuel. We can make one from the dynamo equipment in the work-shack—and we've got to do it somehow before the Greenies rush us again."

"But you know the transformers require pounds and pounds of carbon, as an inhibiting element, a chemical 'governor' to keep the energy being released too fast,"

Jean reminded him. "Without carbon, your transformer would in five minutes blow itself out in a terrific energy explosion. And where can we get that much carbon here?"

"We've got to get it somehow!" Crane declared, his voice raw. "Kruppa, get Whitey and rummage every building here for carbon—every ounce of it, even to lead pencils! And remember that your life depends on it now!"

Kruppa, thoroughly understanding the dire emergency, raced out of the ship. Crane bent and tried to bandage the ghastly fire-scorched wound in Vliet's breast.

"Shouldn't be wasting time—he's a goner anyway," Crane muttered. "But I wouldn't let a dog die without any care at all."

Vliet, opening his eyes, jered weakly.

"You're a soft sentimentalist, Crane. If our positions were reversed, I'd let you die and be damned to you."

"I don't doubt it," Crane said between his teeth.

He and Jean raced toward the work-shack. He inspected the dynamos and other atomic electrical machinery with hasty glances.

"Stuff enough here to make a transformer," he declared. "If we just had more time!"

"You're not saving any time by talking about it," snapped Jean. "Come on and get to work. I've worked with 'solid power' converters, and the chances are I know more about them than you do. You tear down that dynamo first."

Crane found himself working with the girl in a tense, frantic urgency. There was silence except for the clang of tools and the occasional monosyllables they exchanged.

Sweat ran down his face inside

his mask. Jean's crisp blonde hair was disordered, her chin smudged with oil. Crane realized almost at once that the girl engineer did know more about the task than he, and followed her orders. This was no time to assert masculine pride. And somehow it would have been very foolish indeed to do it.

Now and again as he worked, he cast a feverish glance out into the compound. He could see, out there beneath the huge green planet's glow, Herk Ebem and Lin Tikim and young Allison watching around the stockade walls. He could hear the Greenies uttering their chattering cries back in the brooding jungle.

"We can sweep the whole east wall of the stockade, and the whole jungle beyond, with a terrific power blast from here," Jean panted. "If they don't attack before we're finished."

"We're almost through now," Crane grunted, his hopes soaring as he fumbled to make connections. "Five more minutes—"

The thing they had partially built resembled outwardly a stocky pump whose spout pointed toward the stockade, and atop which was a broad, round hopper for the supply of carbon required as chemical 'governor' of the process.

Inside this pump-like object was the hastily assembled electrical apparatus which started the disintegration of "solid power" back into pure energy, by smashing one of its artificial pseudoatoms, the process being self-continuing thenceforward until damped out.

"We've almost got it!" Crane exulted breathlessly. "And here come Whitey and Kruppa with the carbon—"

But Kruppa's face was pallid

with panic as he rushed in.

"There is no carbon here in the compound in any quantity!" the Venusian babbled. "We could find only a few odd ounces."

Crane was aghast, "Whitey, you know this place well! Where can we get carbon in quantity?"

Whitey shook his head. "There just isn't any here in the compound, lad."

A cold, deadly sensation of defeat invaded Crane's heart.

"Then we're licked," he said hoarsely. "We've got the transformer ready and rigged to a power blast that could scythe the Greenies out of existence when they attack. But that power blast would run for just five minutes before it blew us all sky-high, for lack of the carbon 'governor'."

Jean's eyes flashed. "Jimmy, I've an ideal!" she cried. "You get a power cube ready in the chamber."

Before Crane could question her, the girl dashed out of the work-shack. Hopelessly, Crane took one of the little blue-white cubes of solidified energy and placed it in the power chamber of their improvised transformer.

Whitey cried out, from the door. "Good God, she's opening the stockade gate—she's going out!"

Crane, appalled, jumped to the door. Jean had opened the stockade gate and was calmly *walking* out toward the jungle.

The insanity of her act stupefied him. He saw the Greenies breaking from their jungle cover all around the compound, and racing with weird howls toward the girl.

"She must have done it so we could escape out the back of the stockade!"

The Venusian darted out of the work-shack. But neither Whitey

nor Crane, petrified by horror, followed him.

"Nothin' can save her from the devils!" groaned the old man.

Jean had stopped advancing outside the stockade, had turned and was running back through the open gate, with a crowd of hundreds of the green aborigines behind her.

Crane jumped back to the transformer.

"Stand aside, Whitey!" he yelled, reaching for the switches. "I'm going to use the power blast on those devils!"

"But you said that without the carbon it would let go on us—" Whitey started to object.

"It will—but we'll go with Jean before we let them get her!" Crane cried, his face crimson. His hand slammed the switch. He yelled out in a great voice, "Out of the way Jean!"

Jean seemed to hear him. She darted aside from between Crane and the mass of charging Greenies.

The transformer Crane crouched over was groaning, rocking wildly as the power cube started to break down into energy. Crane depressed the blast lever—and out of the blunt spout there leaped a dazzling and awful sword of living white fire, a terrific beam of blazing energy that struck the Greenie mass squarely.

The Greenies were withered and shriped and blackened remnants, where that blast hit them—incinerated by its awful force. Crane played it back and forth, trying to halt the onrushing masses behind.

The transformer was rocking more wildly on its base, threatening to tear itself apart by vibration as the ungoverned conversion of the cube inside it into pure energy

accelerated.

"Oh, Lord, it's going to let go!" Whitey choked. "This is the end of our rocket trail—"

Crane's mind was a roaring chaos. He knew any minute would see the whole tremendous power in the cube blaze forth, to blast the whole compound from the face of the moon.

Then he saw that Jean was running back toward him. She had called Lin Tikim and the others, and they had all snatched up the blackened, cinderized bodies of the slain Greenies, and were running with those masses of horrible remnants toward the work-shack.

"Back!" Crane yelled at them. "This thing is going to give way—"

But Jean and the others came on. They burst into the work-shack and dumped the cinderized bodies they carried into the big hopper of the shaking, roaring transformer.

"Carbon!" Jean yelled to Crane. "The carbon in the Greenies' bodies—it's enough to keep the power flow under control!"

In a flash Crane understood. Carbon was a major constituent of every living thing. And the incinerated bodies of the Greenies, carbonized by the awful blast, were pure enough carbon to serve.

The transformer's terrific rocking and roaring was lessening. The flow of power from the cube was being controlled. And a steady blaze of energy kept blasting from it, scything down the Greenies in and outside the stockade, searing far into the jungle itself and cutting through the vegetation like a flaming sword.

The Greenies, those of them who had not been in the path of the blast, turned and fled. Their chit-

tering cries of panic receded rapidly through the jungle.

Crane shut off the transformer with an unsteady hand. And as the blast died, he turned shakily.

"That's done it!" Whitey was whooping exultantly. "They won't dare attack us again—and even if they did, we could mow 'em down. We've got all the time we need to repair the ships now."

"Jean, you went out there and drew the Greenies in, on purpose!" Crane said unsteadily. "For all you knew, I might have taken the chance to escape out the back, as Kruppa did—"

"Kruppa didn't escape!" Whitey interrupted. "Hey's lying out there behind the ships, by the back of the stockade."

"Then the Greenies must have got him," Crane said. "Come on—"

The fungi-spores had dissipated and they took their masks off.

But when they reached the prostrate Venusian, they found that he had been slain by an atom-pistol whose blast had drilled his back. And Crane, looking up wonderingly, saw that Jan Vliet lay sprawled half out the door of his cruiser, an atom-pistol still gripped in his hand.

Vliet was still living when they reached his limp form. But the mine owner's voice was a weak whisper, his scornful black eyes now dim and shadowy, as he spoke.

"Yes—I got Kruppa," he chuckled feebly. "Had an atom-gun in my ship here and watched for him. Knew I couldn't die till I'd settled with him. Thanks for helping me live that long, Crane!"

Vliet coughed chokingly, then whispered,

"For doing that for me, Crane, I'll tell you something. In my secret compartment in the north wall of

the barracks—where I kept my wealth right under all your noses—you'll find my records. They'll prove I shipped the umbron on your liner and caused the wreck. Will clear your record—"

Crane was strangely moved. "What about your power cubes, Vliet? They're worth millions."

Vliet tried to laugh. "What—the hell—do I care—about millions—now—"

He was dead as the last whispered word left his lips. Crane looked up at the others, Lin Tikim, Whitey, the big Jovian, young Allison.

"You fellows helped earn that money for Vliet," Crane said. "I think you're entitled to one of those cubes apiece. Each is a fortune, you know—they'll make it easier for you, even though you can't go back to your own worlds."

"I'm going back," young Allison declared shakily. "The danger I got Jean into here—it's been enough for me. I'm going to Earth and face the music. Five years won't be so long."

"Brad!" cried Jean, her blue eyes tremulous with gladness. She swung toward Crane. "I'm glad too—about your record—"

"The credit's all yours," Crane declared. "If you hadn't thought up that ruse to draw the Greenies in and use them for carbon, we'd all be atoms by now. And you took that risk, not knowing whether or not I'd really use the blast or try to escape like Kruppa."

Jean looked scornfully at him. "Of course I knew you'd turn on the blast! I knew you'd be willing to be blown up with me if you couldn't save me, when you're so much in love with me."

"In love with you?" Crane cried stupefiedly.

Jean nodded her head coolly. "Of course you are. You have been since we first met. That's why you were so angry with me when you thought I was Vliet's girl friend."

"Why, you're crazy—" Crane started to stammer. Then his jaw dropped, he looked ludicrously amazed, as he stared at her. "Good Lord, maybe you're right. I'll soon find out—"

He grabbed her and kissed her soundly. When he raised his head, he groaned,

"Damn it, you *are* right—I'm nuts about you. Why did you have to go tell me?"

The End

SCIENCE FICTION CLASSICS, DEPT. 2
ULTIMATE PUB. CO.
69-62 230 St.
Bayside, Queens

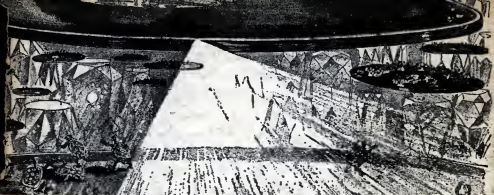
Please send me the issues encircled below, @ 50c a copy
I Enclose _____

No. 1 No. 2 No. 3 No. 4 No. 5 No. 6

Name

Address

City State & Zip No.



ALL EDMOND HAMILTON ISSUE

THE REVOLT ON THE TENTH WORLD
THE OTHER SIDE OF THE MOON
THE MAN WHO LIVED TWICE

